



LC Multi-Residue Pesticide Kit

Kit Safety Information Sheet (SIS)

Details of the supplier of the Kit safety information sheet

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

Kit contents

Name	Product code
LC Multi-Residue Pesticide Standard #1	31972
LC Multi-Residue Pesticide Standard #2	31973
LC Multi-Residue Pesticide Standard #3	31974
LC Multi-Residue Pesticide Standard #4	31975
LC Multi-Residue Pesticide Standard #5	31976
LC Multi-Residue Pesticide Standard #6	31977
LC Multi-Residue Pesticide Standard #7	31978
LC Multi-Residue Pesticide Standard #8	31979
LC Multi-Residue Pesticide Standard #9	31980
LC Multi-Residue Pesticide Standard #10	31981



LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date: 7/8/2025 Revision date: 7/28/2025 Supersedes: 7/15/2025 Version: 3.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #1
Product code : 31972

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Self-reactive substances and mixtures, Type G		
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Hazard statements (GHS US)	: H225 - Highly flammable liquid and vapor H302+H332 - Harmful if swallowed or if inhaled H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (GHS US)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.87

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

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Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	20 ppm
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Color	: Mixture contains one or more component(s) which have the following color(s): Colourless Colourless to yellow white Gray Colorless
Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Pure substance is odourless Commercial/unpurified substance: Irritating/pungent odour Characteristic odour camphor-like Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

LC Multi-Residue Pesticide Standard #1

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #1	
ATE US (oral)	617.803 mg/kg body weight
ATE US (dermal)	296.385 mg/kg body weight
ATE US (dust, mist)	1.502 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #1	
Viscosity, kinematic	No data available

LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s
Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: Toxic in contact with skin.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #1	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
UN-No. (DOT) : 1648

IATA
No data available

LC Multi-Residue Pesticide Standard #1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.87%
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Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 7/28/2025

Issue date : 7/8/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #2
Product code : 31973

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.84

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colorless

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #2	
ATE US (oral)	617.989 mg/kg body weight
ATE US (dermal)	296.474 mg/kg body weight
ATE US (dust, mist)	1.502 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #2	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #2	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
 	 
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.84%
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LC Multi-Residue Pesticide Standard #2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #3
Product code : 31974

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.62

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colourless to white White white light brown Colorless

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #3	
ATE US (oral)	619.354 mg/kg body weight
ATE US (dermal)	297.129 mg/kg body weight
ATE US (dust, mist)	1.506 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #3	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #3	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.62%
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LC Multi-Residue Pesticide Standard #3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #4
Product code : 31975

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.37

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
light yellow light brown Colorless

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: mild Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #4	
ATE US (oral)	620.912 mg/kg body weight
ATE US (dermal)	297.877 mg/kg body weight
ATE US (dust, mist)	1.51 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #4	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #4	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
 	 
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.37%
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LC Multi-Residue Pesticide Standard #4

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #5
Product code : 31976

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.7

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colourless Light yellow Colorless

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #5	
ATE US (oral)	618.857 mg/kg body weight
ATE US (dermal)	296.891 mg/kg body weight
ATE US (dust, mist)	1.505 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #5	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #5	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
 	 
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.7%
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LC Multi-Residue Pesticide Standard #5

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 7/8/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #6
Product code : 31977

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412	Harmful to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H401 - Toxic to aquatic life H412 - Harmful to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.72

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colourless to light yellow Colorless

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Odourless Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #6	
ATE US (oral)	618.732 mg/kg body weight
ATE US (dermal)	296.831 mg/kg body weight
ATE US (dust, mist)	1.504 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #6	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #6	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.72%
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LC Multi-Residue Pesticide Standard #6

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #7
Product code : 31978

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.93

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colorless

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #7	
ATE US (oral)	617.432 mg/kg body weight
ATE US (dermal)	296.207 mg/kg body weight
ATE US (dust, mist)	1.501 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #7	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #7	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
 	 
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.93%
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LC Multi-Residue Pesticide Standard #7

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #8
Product code : 31979

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.99

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colorless

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #8	
ATE US (oral)	617.062 mg/kg body weight
ATE US (dermal)	296.03 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #8	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #8	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
 	 
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.99%
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LC Multi-Residue Pesticide Standard #8

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 7/28/2025

Issue date : 7/8/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #9
Product code : 31980

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 3	H311	Toxic in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 2	H319	Causes serious eye irritation.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 3	H402	Harmful to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412	Harmful to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302+H332 - Harmful if swallowed or if inhaled

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)	: H311 - Toxic in contact with skin H319 - Causes serious eye irritation H370 - Causes damage to organs. H373 - May cause damage to organs through prolonged or repeated exposure H402 - Harmful to aquatic life H412 - Harmful to aquatic life with long lasting effects P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof equipment. P242 - Use non-sparking tools. P243 - Take action to prevent static discharges. P260 - Do not breathe dust, fume, gas, mist, vapors, spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection. P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell. P302+P352 - If on skin: Wash with plenty of water. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P311 - If exposed or concerned: Call a poison center or doctor. P312 - Call a poison center or doctor if you feel unwell. P314 - Get medical advice or attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label). P330 - Rinse mouth. P337+P313 - If eye irritation persists: Get medical advice or attention. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use appropriate media to extinguish. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.
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2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Acetonitrile	CAS-No.: 75-05-8	99.93

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.
Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Acetonitrile (75-05-8)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA	20 ppm
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LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)	
ACGIH® chemical category	Not Classifiable as a Human Carcinogen, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - OSHA - Occupational Exposure Limits	
Local name	Acetonitrile
OSHA PEL TWA	70 mg/m ³
	40 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	137 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	34 mg/m ³
	20 ppm

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid
Color : Mixture contains one or more component(s) which have the following color(s):
Colorless

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Sweet like ether
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Acetonitrile

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

LC Multi-Residue Pesticide Standard #9	
ATE US (oral)	617.432 mg/kg body weight
ATE US (dermal)	296.207 mg/kg body weight
ATE US (dust, mist)	1.501 mg/l/4h

Acetonitrile (75-05-8)	
LD50 oral rat	617 mg/kg
LD50 oral	2230 mg/kg
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LD50 dermal	296 mg/kg
LC50 Inhalation - Rat	26.8 mg/l/4h
LC50 Inhalation - Rat (Vapors)	17.93 mg/l/4h
ATE US (oral)	617 mg/kg body weight
ATE US (dermal)	296 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	17.93 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.

Acetonitrile (75-05-8)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Acetonitrile (75-05-8)	
NOAEC (inhalation, rat, gas, 90 days)	400 ppm Animal: rat, Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #9	
Viscosity, kinematic	No data available

Acetonitrile (75-05-8)	
Viscosity, kinematic	0.47 mm ² /s

Symptoms/effects after inhalation : Harmful if inhaled.
Symptoms/effects after skin contact : Toxic in contact with skin.
Symptoms/effects after eye contact : Eye irritation.

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Symptoms/effects after ingestion : Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

Acetonitrile (75-05-8)	
LC50 - Fish [1]	1600 – 1690 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	> 1000 mg/l
LC50 - Fish [2]	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 72h - Algae [1]	9696 mg/l Source: ECHA
EC50 72h - Algae [2]	9696 mg/l Test organisms (species): Phaeodactylum tricornutum
ErC50 algae	> 1000 mg/l
LOEC (chronic)	> 960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	960 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 102 mg/l
NOEC chronic crustacea	960 mg/l
NOEC chronic algae	700 mg/l

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #9	
Persistence and degradability	Not rapidly degradable

Acetonitrile (75-05-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Acetonitrile (75-05-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.34

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1648	1648
14.2. Proper Shipping Name	
Acetonitrile	Acetonitrile
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : 1648

IATA

No data available

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Acetonitrile	CAS-No. 75-05-8	99.93%
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LC Multi-Residue Pesticide Standard #9

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Acetonitrile (75-05-8)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ

5000 lb

15.2. International regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date

: 7/28/2025

Issue date

: 5/18/2025

Full text of hazard classes and H-statements

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : LC Multi-Residue Pesticide Standard #10
Product code : 31981

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Laboratory use, The product is intended for research, analysis and scientific education

1.4. Supplier's details

Manufacturer

Restek
110 Benner Circle
Bellefonte, Pa, 16823
USA
T 814-353-1300 - F 814-353-9067
www.restek.com

1.5. Emergency phone number

Emergency number : 1-800-424-9300 (Chemtrec within the USA) 00 1 703-741-5970 (Chemtrec Outside the USA)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquid, Category 2	H225	Highly flammable liquid and vapor.
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (inhalation:dust,mist), Category 3	H331	Toxic if inhaled.
Skin corrosion/irritation, Category 1	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Reproductive toxicity, Category 1B	H360	May damage fertility or the unborn child.
Specific target organ toxicity — Single exposure, Category 1	H370	Causes damage to organs.
Specific target organ toxicity — Repeated exposure, Category 1	H372	Causes damage to organs through prolonged or repeated exposure.

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Precautionary statements (GHS US)

H331 - Toxic if inhaled
H360 - May damage fertility or the unborn child
H370 - Causes damage to organs.
H372 - Causes damage to organs through prolonged or repeated exposure

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof equipment.
P242 - Use non-sparking tools.
P243 - Take action to prevent static discharges.
P260 - Do not breathe dusts or mists.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P311 - If exposed or concerned: Call a poison center or doctor.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor.
P311 - Call a poison center or doctor.
P314 - Get medical advice or attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P363 - Take off immediately all contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Comments : Threshold Limit Values Chemicals
The components displayed in section three of this SDS are determined by regulatory threshold values. Only components with concentrations at or above the regulatory reporting requirement are included.

Name	Product identifier	%
Methanol	CAS-No.: 67-56-1	99.99

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a physician immediately.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a doctor.
First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Toxic if inhaled.
Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Harmful if swallowed. Burns.
Chronic symptoms : May damage fertility or the unborn child.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Highly flammable liquid and vapor.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

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Methanol (67-56-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	200 ppm
ACGIH® TLV® STEL	250 ppm
ACGIH® chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: end of shift (background, nonspecific)
USA - OSHA - Occupational Exposure Limits	
Local name	Methyl alcohol
OSHA PEL TWA	260 mg/m ³
	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - IDLH - Occupational Exposure Limits	
IDLH	6000 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA	260 mg/m ³
	200 ppm
NIOSH REL STEL	325 mg/m ³
	250 ppm
US-NIOSH chemical category	Potential for dermal absorption

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

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Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Mixture contains one or more component(s) which have the following color(s): Colourless to light grey clear Colorless
Odor	: There may be no odor warning properties, odor is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odor: Odourless alcohol-like
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosion limits	: No data available
Particle characteristics	: No data available

Methanol

Particle characteristics	No data available
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9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

LC Multi-Residue Pesticide Standard #10

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Toxic if inhaled.

LC Multi-Residue Pesticide Standard #10

ATE US (oral)	1400.14 mg/kg body weight
ATE US (dust, mist)	0.5 mg/l/4h

Methanol (67-56-1)

LD50 oral rat	6200 mg/kg (Source: JAPAN_GHS)
LD50 oral	1400 mg/kg
LD50 dermal rabbit	15840 mg/kg (Source: NLM_HSDB)
LD50 dermal	15800 mg/kg
LC50 Inhalation - Rat [ppm]	22500 ppm (Exposure time: 8 h Source: JAPAN_GHS)
ATE US (oral)	1400 mg/kg body weight
ATE US (dermal)	15800 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns.

Methanol (67-56-1)

pH	12.1 Source: Gestis
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Serious eye damage/irritation : Causes serious eye damage.

Methanol (67-56-1)

pH	12.1 Source: Gestis
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Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.
STOT-single exposure : Causes damage to organs.

LC Multi-Residue Pesticide Standard #10

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Methanol (67-56-1)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

LC Multi-Residue Pesticide Standard #10	
Viscosity, kinematic	No data available

Methanol (67-56-1)	
Viscosity, kinematic	0.687 – 0.688 mm ² /s

Symptoms/effects after inhalation : Toxic if inhaled.
Symptoms/effects after skin contact : Burns.
Symptoms/effects after eye contact : Serious damage to eyes.
Symptoms/effects after ingestion : Harmful if swallowed. Burns.
Chronic symptoms : May damage fertility or the unborn child.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Methanol (67-56-1)	
LC50 - Fish [1]	28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
EC50 - Crustacea [1]	1340 mg/l
LC50 - Fish [2]	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 96h - Algae [1]	22000 mg/l Source: ECHA
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	446.7 mg/l Test organisms (species): Pimephales promelas Duration: '28 d'

12.2. Persistence and degradability

LC Multi-Residue Pesticide Standard #10	
Persistence and degradability	Not rapidly degradable

Methanol (67-56-1)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Methanol (67-56-1)	
BCF - Fish [1]	(10 dimensionless)
Partition coefficient n-octanol/water (Log Pow)	-0.77

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.4. Mobility in soil

Methanol (67-56-1)

Mobility in soil : 2.75 Source: HSDB

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Flammable vapors may accumulate in the container. Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IATA

DOT	IATA
14.1. UN number	
1230	1230
14.2. Proper Shipping Name	
Methanol	Methanol
14.3. Transport hazard class(es)	
3	3 (6.1)
	
14.4. Packing group	
II	II
14.5. Environmental hazards	
Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available	

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
UN-No. (DOT) : 1230

IATA
No data available

LC Multi-Residue Pesticide Standard #10

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according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Methanol	CAS-No. 67-56-1	99.99%
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Methanol (67-56-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

No additional information available

15.3. State regulations

 **WARNING:** This product can expose you to Methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 7/28/2025
Issue date : 5/18/2025

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H331	Toxic if inhaled
H360	May damage fertility or the unborn child
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

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