

Safety Data Sheet

Acrisolon 336

Replaces date: 01/08/2023

Revision date: 01/03/2024

Version: 5.1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: Helamin 906 H C4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses: Corrosion inhibitors and anti-scaling agents.

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Helamin France Sarl
Address: Le Technoparc, 135 rue Thomas-Edison
Zip code: F-01630
City: St-Genis-Pouilly
Country: FRANCE
E-mail: inquiry@helamin.com
Phone: + 33 (0)4 50 42 01 34
Fax: + 33 (0)4 50 42 13 00
Homepage: <http://www.helamin.com>

1.4. Emergency Telephone Number

+33 (0)4 50 42 01 34 (Helamin France Sarl)

Tel. + 33 (0)4 72 11 69 11 (24h) / Centre Antipoison et de Toxicovigilance de Lyon, Bâtiment A, 4ème étage, 162 Avenue Lacassagne, F-69424 Lyon Cedex 03, France

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Acute Tox. 4;H302/312
Skin Corr. 1B;H314
Eye Dam. 1;H318
STOT SE 3;H335
Repr. 2;H361f
STOT RE 2;H373
Aquatic Chronic 3;H412

Most serious harmful effects: Harmful if swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause respiratory irritation. Suspected of damaging fertility. May cause damage to organs through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Prolonged or repeated exposure by skin contact or inhalation of vapours may cause damage to the central nervous system.

Safety Data Sheet

Acrisolon 336

2.2. Label elements

Pictograms



Signal word:

Danger

Contains

Substance:

Cyclohexylamine; 2-Aminoethanol; (Z)-N-9-octadecenylpropane-1,3-diamine;

Hazard Statements

H302/312

Harmful if swallowed or in contact with skin.

H314

Causes severe skin burns and eye damage.

H335

May cause respiratory irritation.

H361f

Suspected of damaging fertility.

H373

May cause damage to organs through prolonged or repeated exposure.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statements

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+361+353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+351+338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER/doctor.

P501

Dispose of contents/container in accordance with local regulation.

2.3. Other hazards

The product does not contain any PBT or vPvB substances.

Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
Cyclohexylamine	108-91-8 203-629-0 01-2119486803-29	15 - 18 %	15	Flam. Liq. 3;H226 Acute Tox. 3;H301 Acute Tox. 3;H311 Skin Corr. 1B;H314 Repr. 2;H361f LD50 (Acute toxicity - dermal): 275 mg/kg bw LD50 (Acute toxicity - oral): 300 mg/kg bw

Safety Data Sheet

Acrisolon 336

2-Aminoethanol	141-43-5 205-483-3 01-2119486455-28	10 - 12 %	Acute Tox. 4;H302/312/332 Skin Corr. 1B;H314 Eye Dam. 1;H318 STOT SE 3;H335 Aquatic Chronic 3;H412 C ≥ 5%: STOT SE 3;H335 LC50 (vapour) (Acute toxicity - inhalation): > 1.3 mg/l LD50 (Acute toxicity - oral): 1089 mg/kg bw
(Z)-N-9-octadecenylpropane-1,3-diamine	7173-62-8 230-528-9 01-2119487002-46	2.5 - 5 %	Acute Tox. 4;H302 Skin Corr. 1B;H314 Eye Dam. 1;H318 STOT RE 1;H372 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 M (acute): 10 M (chronic): 1

Please see section 16 for the full text of H- / EUH-phrases.

15 = REACH-registered with a different classification than in Regulation 1272/2008 Appendix VI.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	Seek fresh air. Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Immediately remove contaminated clothing. Wash the skin thoroughly with water and continue washing for a long time. Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.
General:	When obtaining medical advice, show the safety data sheet or label.

4.2. Most important symptoms and effects, both acute and delayed

Ingestion may cause caustic burning in mouth, esophagus and stomach. Pains in mouth, throat and stomach. Difficulty swallowing, feeling unwell and vomiting of blood. Brown spots and burns may appear in and around the mouth. Has a caustic burning effect and causes burning pain, reddening, blistering and burning sores if it comes in contact with skin. Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight. Inhalation of vapours may cause irritation to the upper airways. Suspected of damaging fertility. Harmful in contact with skin. Harmful if swallowed. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Prolonged or repeated exposure by skin contact or inhalation of vapours may cause damage to the central nervous system. May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms. Ensure that medical personnel are aware of the material involved, and take precautions to protect themselves.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:	Extinguish with powder, foam or water mist. Use water or water mist to cool non-ignited stock.
--------------------------------------	--

Safety Data Sheet

Acrisolon 336

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

The product decomposes when combusted and the following toxic gases can be formed: Carbon monoxide and carbon dioxide/Nitrous gases.

5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air. Extinguishing water which has been in contact with the product may be corrosive. Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Stay upwind/keep distance from source. Stop leak if this can be done without risk. Wear gloves. Wear safety goggles/face protection. In case of insufficient ventilation, wear respiratory protective equipment.

For emergency responders: In addition to the above: Chemical protective suit equivalent to EN 943-2 is recommended.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Wipe up minor spills with a cloth. Caution! Causes burns. Rinse with water.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Running water and eye wash equipment must be available. A safety shower must be available. Wash hands before breaks, before using restroom facilities, and at the end of work. A workplace assessment must be conducted to ensure that employees are not exposed to effects that may involve a risk during pregnancy or when breastfeeding.

7.2. Conditions for safe storage, including any incompatibilities

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Keep in tightly closed original packaging.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Safety Data Sheet

Acrisolon 336

Substance name	Time period	ppm	mg/m ³	fiber/cm ³	Remarks	Notation
2-aminoethanol	15m	3	7.6		OEL value for: 2-aminoethanol	Skin
2-aminoethanol	8h	1	2.5		OEL value for: 2-aminoethanol	Skin

Skin = A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin.

Measuring methods:

Compliance with occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis:

Commission Directive 2000/39/EC (Occupational Exposure Limits) as subsequently amended. Last amended by Commission Directive 2019/1831/EU. Directive 2004/37/EC (Exposure to carcinogens or mutagens at work) as subsequently amended. Last amended by Directive 2022/431/EU. Resolution 2019/2182(INL) (Protecting workers from asbestos) as subsequently amended. Last amended by resolution 2022/C 184/03.

PNEC

Cyclohexylamine, cas-no 108-91-8				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC STP (wastewater-treatment facilities)	22,52 mg/l			
PNEC aqua (freshwater)	0,016 mg/l			
PNEC soil	0,805 mg/kg dw			
PNEC sediment (freshwater)	4,1 mg/kg dw			
PNEC sediment (marine water)	0,41 mg/kg dw			
PNEC aqua (marine water)	0,0016 mg/l			
2-Aminoethanol, cas-no 141-43-5				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	0,085 mg/l			
PNEC aqua (marine water)	0,0085 mg/l			
PNEC soil	0,035 mg/kg			
PNEC STP (wastewater-treatment facilities)	100 mg/l			
PNEC sediment (freshwater)	0,434 mg/kg			
PNEC sediment (marine water)	0,0434 mg/kg			
PNEC aqua (intermittent releases)	0.028 mg/l			
(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC STP (wastewater-treatment facilities)	0,251 mg/l			
PNEC aqua (freshwater)	0,010 mg/l			
PNEC sediment (freshwater)	1,72 mg/kg dw			

Safety Data Sheet

Acrisolon 336

PNEC soil	10 mg/kg dw			
-----------	-------------	--	--	--

DNEL - workers

Cyclohexylamine, cas-no 108-91-8

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (acute/short-term exposure - systemic effects)	0,8 mg/kg bw/day				
Dermal DNEL (long-term exposure - systemic effects)	0,4 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - systemic effects)	8,2 mg/m³				
Inhalation DNEL (long-term exposure - systemic effects)	5 mg/m³				

2-Aminoethanol, cas-no 141-43-5

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	1 mg/kg bw/day				
Inhalation DNEL (long-term exposure - local effects)	3,3 mg/m³				

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	0.0056 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	0,0395 mg/m³				

DNEL - general population

Cyclohexylamine, cas-no 108-91-8

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (acute/short-term exposure - systemic effects)	0.4 mg/kg bw/day				
Oral DNEL (acute/short-term exposure - systemic effects)	0.4 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - systemic effects)	1.2 mg/m³				

Safety Data Sheet

Acrisolon 336

Oral DNEL (long-term exposure - systemic effects)	0.2 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	0.6 mg/m³				
Dermal DNEL (long-term exposure - systemic effects)	0.2 mg/kg bw/day				

2-Aminoethanol, cas-no 141-43-5

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - local effects)	2 mg/m³				
Dermal DNEL (long-term exposure - systemic effects)	0,24 mg/kg bw/day				
Oral DNEL (long-term exposure - systemic effects)	3,75 mg/kg bw/day				

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	0.007 mg/cm³				
Dermal DNEL (long-term exposure - systemic effects)	0.002 mg/kg bw/day				
Oral DNEL (long-term exposure - systemic effects)	0.002 mg/kg bw/day				

8.2. Exposure controls

Appropriate engineering controls:

Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection:

Wear safety goggles/face protection. Eye protection must conform to EN 166.

Personal protective equipment, skin protection:

Wear gloves. Type of material: Butyl rubber/Perfluorelastomer/Fluorsilicone/PTFE. Gloves must conform to EN 374. Breakthrough time has not been determined for the product. Change gloves often.

Personal protective equipment, respiratory protection:

Use process ventilation. If this is not possible, use respiratory equipment. Filter type: K. Respiratory protection must conform to one of the following standards: EN 136/140/145.

Environmental exposure controls:

Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Liquid

Safety Data Sheet

Acrisolon 336

Colour	Colourless / Light yellow
Odour	Characteristic
Solubility	Solubility in water: Completely miscible

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	No data	
Freezing point	-1 °C	
Initial boiling point and boiling range	100 °C	(DIN 51794)
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	No data	
Flash Point	No data	
Auto-ignition temperature		Not spontaneously flammable
Decomposition temperature	No data	
pH (solution for use)	No data	
pH (concentrate)	12	
Kinematic viscosity	No data	
Viscosity	No data	
Partition coefficient n-octanol/water	No data	
Vapour pressure	23 hPa	
Density	No data	
Relative density	1	
Vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	No data	

9.2. Other information

Other Information: None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Not reactive.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Safety Data Sheet

Acrisolon 336

Carbon monoxide and carbon dioxide/ Nitrous gases.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

Cyclohexylamine, cas-no 108-91-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
	LD50	7 d (1-4% solution)	300 mg/kg bw			

2-Aminoethanol, cas-no 141-43-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		1089 mg/kg bw		OECD 401	

Harmful if swallowed.

Acute toxicity - dermal

Cyclohexylamine, cas-no 108-91-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		275 mg/kg bw			

Harmful in contact with skin.

Acute toxicity - inhalation

Cyclohexylamine, cas-no 108-91-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50 (vapour)	4h	> 700 mg/l			

2-Aminoethanol, cas-no 141-43-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
	LC50 (vapour)	6h	> 1.3 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation

2-Aminoethanol, cas-no 141-43-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Corrosive	OECD 404	

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Corrosive	OECD 404	

Has a caustic burning effect and causes burning pain, reddening, blistering and burning sores if it comes in contact with skin.

Serious eye damage/eye irritation

2-Aminoethanol, cas-no 141-43-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Corrosive		

Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight.

Safety Data Sheet

Acrisolon 336

Respiratory sensitisation or skin sensitisation

2-Aminoethanol, cas-no 141-43-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Guinea pig	Maximisation Test			Non-sensitising	OECD 406	

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Germ cell mutagenicity

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
	Ames test			Negative	OECD 471	
	In vitro mammalian cell gene mutation test			Negative	OECD 476	
	Chromosome aberration test in vitro			Negative	OECD 473	

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Carcinogenic properties: The product does not have to be classified. Test data are not available.

Reproductive toxicity

Cyclohexylamine, cas-no 108-91-8

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	NOAEL (oral)		> 100 mg/kg bw/day	Suspected of damaging fertility.		

Suspected of damaging fertility.

Single STOT exposure: Inhalation of vapours may cause irritation to the upper airways. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

Repeated STOT exposure: May cause damage to organs through prolonged or repeated exposure. Prolonged or repeated exposure by skin contact or inhalation of vapours may cause damage to the central nervous system.

Aspiration hazard: The product does not have to be classified. Test data are not available.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

Other toxicological effects: Ingestion may cause caustic burning in mouth, oesophagus and stomach. Pains in mouth, throat and stomach. Difficulty swallowing, feeling unwell and vomiting of blood. Brown spots and burns may appear in and around the mouth.

SECTION 12: Ecological information

12.1. Toxicity

Safety Data Sheet

Acrisolon 336

Cyclohexylamine, cas-no 108-91-8

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Crustacea	Daphnia magna		21dNOEC	1.6 mg/l			
Fish			14dLC50	19 mg/l			
Crustacea	Daphnia magna		EC50	36.3 mg/l			
Algae	Selenastrum capricornutum		72hNOEC	10.3 mg/l			
Algae	Selenastrum capricornutum		72hEC50	29.3 mg/l			

2-Aminoethanol, cas-no 141-43-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Cyprinus carpio		96hLC50	349 mg/l			
Algae	Scenedesmus subspicatus		72hEC50	22 mg/l		OECD 201	
Bacteria		3 h	EC	> 1000 mg/l		OECD 209	
Crustacea	Daphnia magna		48hEC50	65 mg/l			
Fish	Carassius auratus		96hLC50	170 mg/l			
Fish	Oryzias latipes		30dNOEC	1.2 mg/l			
Bacteria		30 min	EC20	> 1000 mg/l		OECD 209	
Algae	Scenedesmus capricornutum		72hEC50	2.5 mg/l			
Crustacea	Daphnia magna		21dNOEC	0.85 mg/l		OECD 211	
Bacteria	Pseudomonas putida	16h		110		DIN 38412	

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Brachydanio rerio		96hLC50	0.1 - 1 mg/l		OECD 203	
Crustacea	Daphnia magna		48hEC50	0.01 - 0.1 mg/l		OECD 202	
Crustacea	Daphnia magna		21dNOEC	0.001 - 0.1 mg/l		OECD 211	
Algae	Desmodesmus subspicatus		72hEC50	0.01 - 0.1 mg/l		OECD 201	
Algae	Desmodesmus subspicatus		72hEC10	0.01 - 0.1 mg/l		OECD 201	

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

2-Aminoethanol, cas-no 141-43-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
		21d		> 90 %	Readily biodegradable.	OECD 301 A	

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Safety Data Sheet

Acrisolon 336

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					Readily biodegradable.	OECD 301 D	

Expected to be biodegradable.

12.3. Bioaccumulative potential

Cyclohexylamine, cas-no 108-91-8

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Log Pow	3.7			
Fish			BCF	2.8	No bioaccumulation expected.		

2-Aminoethanol, cas-no 141-43-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Log Kow	-2.46			

(Z)-N-9-octadecenylpropane-1,3-diamine, cas-no 7173-62-8

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					No bioaccumulation expected.		

No bioaccumulation expected.

12.4. Mobility in soil

Cyclohexylamine, cas-no 108-91-8

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Log Koc	3.4	Expected to be mobile in soil.		

Expected to be mobile in soil.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

The product affects the pH value of the local aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid discharge to drain or surface water. If this product as supplied becomes a waste, it meets the criteria of a hazardous waste (Dir. 2008/98/EU). Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

Empty, cleansed packaging should be disposed of for recycling. Uncleansed packaging is to be disposed of via the local waste-removal scheme.

Category of waste: Product: 16 05 08* discarded organic chemicals consisting of or containing hazardous

Safety Data Sheet

Acrisolon 336

Category of waste:

substances

Absorbent/cloth contaminated with the product: EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	2735	14.4. Packing group:	II
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Cyclohexylamine)	14.5. Environmental hazards:	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	8		
Hazard label(s):	8		
Hazard identification number:	80	Tunnel restriction code:	E

Inland water ways transport (ADN)

14.1. UN number or ID number:	2735	14.4. Packing group:	II
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Cyclohexylamine)	14.5. Environmental hazards:	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	8		
Hazard label(s):	8		
Transport in tank vessels:	Not applicable.		

Sea transport (IMDG)

14.1. UN number or ID number:	2735	14.4. Packing group:	II
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Cyclohexylamine)	14.5. Environmental hazards:	The product is not a Marine Pollutant (MP).
14.3. Transport hazard class(es):	8	Environmental Hazardous Substance Name(s):	
Hazard label(s):	8		
EmS:	F-A, S-B	IMDG Code segregation group:	Segr. grp. 18 - Alkalis (SGG18)

Air transport (ICAO-TI / IATA-DGR)

14.1. UN number or ID number:	2735	14.4. Packing group:	II
14.2. UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Cyclohexylamine)	14.5. Environmental hazards:	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	8		
Hazard label(s):	8		

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

Safety Data Sheet

Acrisolon 336

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Special Provisions: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

Covered by:
Council Directive (EC) on the protection of young people at work.
Council Directive (EC) on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

15.2. Chemical Safety Assessment

REACH Reg. No.	Substance name
01-2119486455-28	2-Aminoethanol
01-2119486803-29	Cyclohexylamine
01-2119487002-46	(Z)-N-9-octadecenylpropane-1,3-diamine

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
5.1.0	19/06/2023	Bureau Veritas HSE/LJO	1,2,3,7,8,11,12,15,16

Abbreviations:
PBT: Persistent, Bioaccumulative and Toxic
vPvB: Very Persistent and Very Bioaccumulative
STOT: Specific Target Organ Toxicity
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration

Other Information: This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. They are given for information only. They do not constitute a contractual guarantee of a product's properties. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.

Training advice: A thorough knowledge of this safety data sheet should be a prerequisite condition.

Classification method: Calculation based on the hazards of the known components.
Test data.

List of relevant H-statements

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302/312	Harmful if swallowed or in contact with skin.
H302/312/332	Harmful if swallowed, in contact with skin or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Safety Data Sheet

Acrisolon 336

H335	May cause respiratory irritation.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.

SDS is prepared by

Company:	Bureau Veritas HSE Denmark A/S
Address:	Oldenborggade 25-31
Zip code:	7000
City:	Fredericia
Country:	DENMARK
E-mail:	infohse@bureauveritas.com
Phone:	+45 77 31 10 00
Homepage:	www.bureauveritas.dk

Country: EU

