



Becton, Dickinson and Company
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07417 USA
www.bd.com

SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
660585	BD™ Detergent Solution Concentrate	

Other means of identification

SDS number: 088100200356

Recommended use and restriction on use

Recommended use: Scientific and Industrial laboratory use.

Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Becton, Dickinson and Company - BD Biosciences
Address: 2350 Qume Drive
95131 San Jose, CA USA
Telephone: 1 877 232 8995 or 1 800 424 9300
Fax:
Contact Person: Technical Services
E-mail: ResearchApplications@bd.com or ClinicalApplications@bd.com

Emergency telephone number: ChemTrec 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation Category 1A
Serious Eye Damage/Eye Irritation Category 1

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: H314: Causes severe skin burns and eye damage.



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Precautionary Statements

- Prevention:** P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P264: Wash thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
- Response:** 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.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER/doctor.
P321: Specific treatment (see on this label).
P363: Wash contaminated clothing before reuse.
- Storage:** P405: Store locked up.
- Disposal:** P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification:** None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Acetic acid, 2-hydroxy-		79-14-1	10%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

- General information:** Causes severe skin burns and eye damage. Get immediate medical advice/attention.
- Ingestion:** Call a physician or poison control center immediately. Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.



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Inhalation: Move to fresh air. Get medical attention if any discomfort continues.

Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Get medical attention promptly if symptoms occur after washing.

Eye contact: Important! Immediately rinse with water for 60 minutes. Get medical attention immediately. Continue to rinse.

Most important symptoms/effects, acute and delayed

Symptoms: Symptoms may be delayed.

Hazards: Causes severe skin burns and eye damage.

Indication of immediate medical attention and special treatment needed

Treatment: IF exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

General Fire Hazards: Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No unusual fire or explosion hazards noted.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures



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Personal precautions, protective equipment and emergency procedures:	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate closed spaces before entering them. Avoid breathing mists or vapors. Keep unauthorized personnel away.
Methods and material for containment and cleaning up:	Stop leak if possible without any risk. Prevent runoff from entering drains, sewers, or streams. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling:	Avoid contact with eyes and prolonged or repeated contact with skin. Avoid inhalation of vapors and spray mists. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Provide good ventilation.
Conditions for safe storage, including any incompatibilities:	Store in original tightly closed container. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames, and high temperatures.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls

Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Eye/face protection:	Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection	
Hand Protection:	Suitable gloves can be recommended by the glove supplier.
Other:	Chemical resistant clothing
Respiratory Protection:	In case of inadequate ventilation use suitable respirator.



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Hygiene measures: Observe good industrial hygiene practices. Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	No data available.
Color:	Pale yellow
Odor:	Odorless
Odor threshold:	No data available.
pH:	2.5
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	Very Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	Product is not reactive under normal conditions and recommended use.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Stable; however, may decompose if heated.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight. Do not freeze.



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Incompatible Materials: Avoid contact with oxidizers or reducing agents.

Hazardous Decomposition Products: By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: No data available.

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy-
LOAEL (Rat(Female, Male), Oral, 90 - 131 d): 300 mg/kg Oral Experimental result, Key study
NOAEL (Rat(Male), Oral, 90 - 131 d): 150 mg/kg Oral Experimental result, Key study
NOAEL (Rat(Male), Inhalation): 0.23 mg/l Inhalation Experimental result, Supporting study
NOAEL (Rat(Female), Oral, 90 - 131 d): 600 mg/kg Oral Experimental result,



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Key study
NOAEL (Rat(Female, Male), Oral, 90 - 131 d): 600 mg/kg Oral Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy- in vivo (Rabbit): Corrosive Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.



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Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: Not expected to be harmful to aquatic organisms.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy- EC 50 (Daphnia magna, 48 h): 141 mg/l Experimental result, Key study
EC 50 (Daphnia magna, 24 h): 141 mg/l Experimental result, Key study
NOAEL (Daphnia magna, 48 h): 100 mg/l Experimental result, Key study

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy- 78 % (11 d) Detected in water. Experimental result, Key study
50 % (2 d) Sediment Experimental result, Supporting study
89.6 % (7 d) Detected in water. Experimental result, Supporting study
96 % (28 d) Sediment Experimental result, Supporting study
10 % (1 d) Sediment Experimental result, Supporting study

BOD/COD Ratio



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Product: No data available.

**Bioaccumulative potential
Bioconcentration Factor (BCF)**

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Acetic acid, 2-hydroxy- Log Kow: -1.11

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Acetic acid, 2-hydroxy- No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal instructions: This material and/or its container must be disposed of as hazardous waste.

Contaminated Packaging: No data available.

14. Transport information

DOTUN Number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Packing Group:	Not regulated.
Marine Pollutant:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
Special precautions for user:	Not regulated.



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IMDG

UN Number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
EmS No.:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine Pollutant:	Not regulated.
Special precautions for user:	Not regulated.

IATA

UN Number:	Not regulated.
Proper Shipping Name:	Not regulated.
Transport Hazard Class(es):	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine pollutant:	Not regulated.
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate (Acute) Health Hazards
Skin Corrosion or Irritation
Serious eye damage or eye irritation

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.



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SARA 304 Emergency Release Notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Acetic acid, 2-hydroxy-	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

16. Other information, including date of preparation or last revision

Issue Date: 03/29/2019

Version #: 1.1

Revision Information:

Further Information: No data available.



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