SAFETY DATA SHEET

1. Identification

Product identifier

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Product name:</th>
<th>Common name(s), synonym(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>260815</td>
<td>BD™ ChloraPrep™ with Tint, 26 mL</td>
<td></td>
</tr>
</tbody>
</table>

Other means of identification

SDS number: 088100243277

Recommended use and restriction on use

Recommended use: Skin Antiseptic
Restrictions on use: For External Use Only

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Becton Dickinson
Address: 1550 Northwestern Dr
El Paso, TX 79912 USA
Telephone: 800-523-0502 (Monday to Friday 8 a.m. to 5 p.m. CT)
Fax: 
Contact Person: Customer Service

Emergency telephone number: ChemTrec 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 2

Health Hazards

Serious Eye Damage/Eye Irritation Category 2
Specific Target Organ Toxicity - Single Exposure Category 3

Environmental Hazards

Acute hazards to the aquatic environment Category 2
Chronic hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:
Signal Word: Danger

Hazard Statement:
H225: Highly flammable liquid and vapour.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H401: Toxic to aquatic life.
H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P242: Use non-sparking tools.
P273: Avoid release to the environment.

Response:
P370+P378: In case of fire: Use water for extinction.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

Storage:
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

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:
- May cause permanent damage if permitted to enter and remain in the ears or eyes for a long period of time.

3. Composition/information on ingredients
Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td></td>
<td>67-63-0</td>
<td>62.3%</td>
</tr>
<tr>
<td>D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-dimino-2,4,11,13-tetraazatetradecanidimidine (2:1)</td>
<td></td>
<td>18472-51-0</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

General information: Get medical attention if symptoms occur.

Ingestion: Drink plenty of water. Get medical attention immediately.

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

Skin Contact: Wash skin thoroughly with soap and water.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: not applicable

Specific hazards arising from the chemical: No data available.

Special protective equipment and precautions for firefighters
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**
See Section 8 of the SDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:**
Small quantities may be flushed to drains with plenty of water. Large Spillages: Absorb spillage with non-combustible, absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

**Notification Procedures:**
Considering the size of the packaging, the risk is regarded as minimal.

**Environmental Precautions:**
Avoid release to the environment.

7. Handling and storage

**Precautions for safe handling:**
Do not eat, drink or smoke when using the product. Avoid ingestion. Avoid contact with eyes, ears, mouth For External Use Only

**Conditions for safe storage, including any incompatibilities:**
Avoid contact with oxidizing agents. Store in a cool, dry place. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids. Store at room temperature (68 degrees F to 77 degrees F). Avoid excessive heat (104 degrees F). Store isolated from oxidizers, ignition sources, and explosives. Consult local fire codes for additional storage information. Keep out of reach of children.

8. Exposure controls/personal protection

**Control Parameters**

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>TWA</td>
<td>400 ppm 980 mg/m3</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m3</td>
<td>US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>400 ppm 980 mg/m3</td>
<td>US. Tennessee OELs, Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td></td>
<td>STEL</td>
<td>500 ppm 1,225 mg/m3</td>
<td>US. Tennessee OELs, Occupational Exposure Limits, Table Z1A (06 2008)</td>
</tr>
<tr>
<td></td>
<td>AN ESL</td>
<td>200 ppb</td>
<td>US. Texas Effects Screening Levels (Texas Commission on Environmental Quality) (12)</td>
</tr>
</tbody>
</table>
ST ESL                     2,000 ppb  US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
AN ESL                     492 µg/m^3  US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
ST ESL                     4,920 µg/m^3 US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
TWA PEL                    400 ppm  980 mg/m^3 US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
STEL                       500 ppm  1,225 mg/m^3 US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
STEL                       400 ppm  US. ACGIH Threshold Limit Values (12 2010)
TWA                        200 ppm  US. ACGIH Threshold Limit Values (12 2010)
REL                        400 ppm  980 mg/m^3 US. NIOSH: Pocket Guide to Chemical Hazards (2005)
STEL                       500 ppm  1,225 mg/m^3 US. NIOSH: Pocket Guide to Chemical Hazards (2005)
PEL                        400 ppm  980 mg/m^3 US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Biological Limit Values

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol (acetone: Sampling time: End of shift at end of work week.)</td>
<td>40 mg/l (Urine)</td>
<td>ACGIH BEI (03 2013)</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls

Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

General information: Eye bath.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection
Hand Protection: Latex gloves for normal use, Nitrile gloves recommended for spill cleanup
Other: No special precautions.

Respiratory Protection: None should be needed.

Hygiene measures: Avoid contact with eyes.

9. Physical and chemical properties

Appearance
Physical state: liquid
Form: liquid
Color: According to product specification.
Odor: alcohol-like
Odor threshold: No data available.
PH: estimated 7.0
Melting point/freezing point: No data available.
Initial boiling point and boiling range: 87.0 °C
Flash Point: 19.4 °C
Evaporation rate: No data available.
Flammability (solid, gas): Flammable liquid
Upper/lower limit on flammability or explosive limits
   Flammability limit - upper (%): 12.7 %(V)
   Flammability limit - lower (%): 2.2 %(V)
   Explosive limit - upper (%): No data available.
   Explosive limit - lower (%): No data available.
Vapor pressure: 43 hPa
Vapor density: No data available.
Relative density: 0.880
Solubility(ies)
   Solubility in water: Soluble
   Solubility (other): Soluble
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: Product is not self-igniting.
Decomposition temperature: No data available.
Viscosity: No data available.

Other information
   Minimum ignition temperature: 425 °C

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Not determined.
Conditions to avoid: Excessive heat.
Incompatible Materials: Strong oxidizers, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium
11. Toxicological information

Information on likely routes of exposure

Ingestion: Due to the small packaging the risk of ingestion is minimal.

Inhalation: None under normal conditions.

Skin Contact: Prolonged or repeated skin contact may cause drying, cracking, or irritation.

Eye contact: Do not get in eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No specific symptoms noted.

Skin Contact: Repeated exposure may cause skin dryness or cracking.

Eye contact: Causes serious eye irritation. May cause permanent damage if eye is not immediately irrigated.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 73,913.04 mg/kg

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s): 2-Propanol

NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s): 2-Propanol

in vivo (Rabbit): Experimental result, Key study
D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazatetradecanedi midamide (2:1)

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
2-Propanol in vivo (Rabbit): Experimental result, Key study

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):
2-Propanol 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

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.
Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

**Fish**

Product: No data available.

**Specified substance(s):**

- 2-Propanol
  - LC 50 (Fathead minnow (Pimephales promelas), 1 h): 11,830 mg/l Mortality
  - LC 50 (Goldfish (Carassius auratus), 24 h): > 5,000 mg/l Mortality
  - LC 50 (Western mosquitofish (Gambusia affinis), 48 h): > 1,400 mg/l Mortality
  - LC 50 (Fathead minnow (Pimephales promelas), 48 h): 11,130 mg/l Mortality
  - LC 50 (Fathead minnow (Pimephales promelas), 96 h): 9,230 - 10,000 mg/l Mortality

- D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-dimino-2,4,11,13-tetraazatetradecanediimide (2:1)
  - LC 50 (Zebra danio (Danio rerio), 96 h): 2.08 mg/l
  - LC 50 (Danio rerio, 96 h): 2.08 mg/l Experimental result, Key study
  - LC 10 (Poecilia reticulata, 5 d): 22 mg/l Experimental result, Supporting study
  - LC 0 (Danio rerio, 96 h): 2 mg/l Experimental result, Key study
  - LC 100 (Danio rerio, 96 h): 3.6 mg/l Experimental result, Key study

**Aquatic Invertebrates**

Product: No data available.

**Specified substance(s):**

- 2-Propanol
  - LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study
  - ED 0 (Daphnia magna, 24 h): 5,102 mg/l Experimental result, Supporting study
  - EC 50 (Daphnia magna, 24 h): 9,714 mg/l Experimental result, Supporting study
  - EC 100 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Supporting study
  - LC 0 (Daphnia magna, 24 h): 5,000 mg/l Experimental result, Key study

- D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-dimino-2,4,11,13-tetraazatetradecanediimide (2:1)
  - EC 100 (Daphnia magna, 48 h): 0.12 mg/l Experimental result, Key study
  - EC 50 (Daphnia magna, 48 h): 0.087 mg/l Experimental result, Key study
  - ED 0 (Daphnia magna, 48 h): 0.04 mg/l Experimental result, Key study
  - EC 50 (Daphnia magna, 48 h): 0.05 - 0.1 mg/l Experimental result, Not specified
Chronic hazards to the aquatic environment:

**Fish**
Product: No data available.

**Aquatic Invertebrates**
Product: No data available.

**Specified substance(s):**
D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazaotetradecanediimide (2:1)

NOAEL (Daphnia magna, 21 d): 20.6 µg/l Experimental result, Key study
EC 50 (Daphnia magna, 21 d): 35.8 µg/l Experimental result, Key study
LOAEL (Daphnia magna, 21 d): 61.8 µg/l Experimental result, Key study
EC 100 (Daphnia magna, 21 d): 61.8 µg/l Experimental result, Key study

**Toxicity to Aquatic Plants**
Product: No data available.

Persistence and Degradability

**Biodegradation**
Product: No data available.

**Specified substance(s):**
2-Propanol

53 % (5 d) Detected in water. Experimental result, Key study

D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazaotetradecanediimide (2:1)

52 % Detected in water. Experimental result, Key study
100 % Detected in water. Experimental result, Not specified
79 % Detected in water. Experimental result, Key study
71 % Detected in water. Experimental result, Key study
90 % (28 d) Detected in water. Experimental result, Not specified

**BOD/COD Ratio**
Product: No data available.

Bioaccumulative potential

**Bioconcentration Factor (BCF)**
Product: No data available.

**Specified substance(s):**
D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-dimino-2,4,11,13-tetraazatetradecanediimide (2:1)  Leuciscus idus, Bioconcentration Factor (BCF): 42 Aquatic sediment Experimental result, Key study
Leuciscus idus, Bioconcentration Factor (BCF): 40 Aquatic sediment Experimental result, Key study
Bioconcentration Factor (BCF): 1.77 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study
Green algae (Chlorella fusca vacuolata), Bioconcentration Factor (BCF): 2,560 (Static)
Carp (Leuciscus idus melanotus), Bioconcentration Factor (BCF): 42 (Renewal)

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.
Specified substance(s): 2-Propanol Log Kow: 0.05

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
2-Propanol No data available.
D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-dimino-2,4,11,13-tetraazatetradecanediimide (2:1) 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: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.
14. Transport information

DOT

UN Number: UN 1219
UN Proper Shipping Name: Isopropanol
Transport Hazard Class(es)
  Class: 3
  Label(s): 3
Packing Group: II
Marine Pollutant: No

Special precautions for user: Ltd. Qty

IMDG

UN Number: UN 1219
UN Proper Shipping Name: ISOPROPNOL
Transport Hazard Class(es)
  Class: 3
  Subsidiary risk: 3
  EmS No.: F-E, S-D
Packing Group: II
Environmental Hazards
  Marine Pollutant: No

Special precautions for user: Ltd. Qty

IATA

UN Number: ID 8000
Proper Shipping Name: Consumer commodity
Transport Hazard Class(es):
  Class: 9
  Subsidiary risk: 9MI
Packing Group: –
Environmental Hazards
  Marine pollutant: No

Special precautions for user: LQ

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):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Supervision Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
- Fire Hazard
- Immediate (Acute) Health Hazards
- Flammable liquids
- Serious Eye Damage/Eye Irritation
- Specific Target Organ Toxicity - Single Exposure
- Static-accumulating flammable liquid

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>D-Gluconic acid, compd. with N1,N14-bis(4-chlorophenyl)-3,12-diimo-2,4,11,13-tetraazatetracedanediimidamide (2:1)</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reporting threshold for other users</th>
<th>Reporting threshold for manufacturing and processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propanol</td>
<td>10000 lbs</td>
<td>25000 lbs.</td>
</tr>
</tbody>
</table>

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 regulated by CA Prop 65 present.
US. New Jersey Worker and Community Right-to-Know Act
**Chemical Identity**
2-Propanol

US. Massachusetts RTK - Substance List
**Chemical Identity**
2-Propanol

US. Pennsylvania RTK - Hazardous Substances
**Chemical Identity**
2-Propanol

US. Rhode Island RTK
**Chemical Identity**
2-Propanol

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

**HMIS Hazard ID**

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<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Hazards</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

PERSONAL PROTECTION B
```

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

**NFPA Hazard ID**

```
2 3 0
```

- Flammability
- Health
- Reactivity
- Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:**
02/27/2018
Version #: 1.0

Revision Information: No data available.

Further Information: No data available.

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