SAFETY DATA SHEET

1. Identification

Product identifier
DISSCO® Paviseal Emulsified Asphalt Seal Coating

Other means of identification
Sealcoat, Mineral Filled Emulsion, Asphalt Emulsion, Emulsified Bitumen.

Recommended use
Used as a pavement seal coating for asphalt pavements.

Recommended restrictions
Not known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
Manufacturer: DISSCO® - Denver Industrial Sales and Service Co.
Address: 850 South Lipan Street
Denver, CO 80223
Contact Name: Todd Mellema
Telephone: 303-935-2485
E-mail: todd@dissco.net
INFOTRAC: 1-800-535-5053

2. Hazard(s) identification

Physical hazards
Flammable liquids Category 0

Health hazards
Specific target organ toxicity, single exposure Category 1

Environmental hazards
Not classified Category 0

OSHA defined hazards
Not classified

Label elements

Hazard symbol None

Signal word None

Hazard statement The mixture does not meet the criteria for classification.

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations. See section 13 of this SDS for disposal instructions.

Hazard(s) not otherwise classified (HNOC) None known

Supplemental information Vapors containing hydrogen sulfide may accumulate during storage or transport. HYDROGEN SULFIDE (H2S) can be harmful or fatal if inhaled.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common Name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT</td>
<td></td>
<td>8052-42-4</td>
<td>20 - 30</td>
</tr>
<tr>
<td>WATER</td>
<td></td>
<td>7732-18-5</td>
<td>30 - 50</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID</td>
<td></td>
<td>7647-01-0</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>MINERAL FILLERS</td>
<td></td>
<td>14808-60-7</td>
<td>30 - 50</td>
</tr>
<tr>
<td>FIBERS</td>
<td></td>
<td>9004-34.6</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>
Composition comments
Components not listed are either non-hazardous or below the required disclosure threshold.

4. First-aid Measures

Inhalation
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
Call a physician if symptoms develop or persist.

Skin contact
If clothing sticks to the skin, do not remove. Lotion or hand cream may aid in the removal of asphalt. Wash contact areas with soap and water. If needed, seek medical attention.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. DO NOT induce vomiting. Get medical attention immediately. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms/effects, acute and delayed
Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed
Treat symptomatically.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media
Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection.

Fire-fighting Equipment/instructions
ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray.

Specific methods
In the event of fire and/or explosion, do not breathe fumes. In the event of fire, cool tanks with water spray.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak
Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
This product is miscible in water.
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Ventilate area and avoid breathing vapors or mist. For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage
Precautions for safe handling
Avoid prolonged exposure. Use only in well-ventilated areas. Hydrogen sulfide, a very highly toxic gas, may be present with this material. Keep face clear of tank and/or tank car openings. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Conditions for safe storage,
Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not allow material to freeze.

8. Exposure controls/personal protection
Occupational exposure limits
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Components | Type | Value
--- | --- | ---
HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 7 mg/m3

US. ACGIH Threshold Limit Values
Components | Type | Value | Form
--- | --- | --- | ---
ASPHALT (CAS 8052-42-4) (CAS 8008-20-6) | TWA | 0.5 mg/m3 | Inhalable fraction.

US. ACGIH Threshold Limit Values
Components | Type | Value | Form
--- | --- | --- | ---
HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 2 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards
Components | Type | Value | Form
--- | --- | --- | ---
ASPHALT (CAS 8052-42-4) | Ceiling | 5 mg/m3 | Fume.
HYDROCHLORIC ACID (CAS 7647-01-0) | Ceiling | 7 mg/m3 | 5 ppm

Biological limit values
No biological exposure limits noted for the ingredient(s)

Appropriate engineering
Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses; chemical goggles (if splashing is possible)

Hand protection
Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

Other
Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact. Plastic or rubber gloves, apron and boots.

Respiratory protection
When workers are facing concentrations above the exposure limit, they must use appropriate certified respirators.

Thermal hazard
Wear appropriate thermal protective clothing, when necessary.

General hygiene
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Brown to black in color.

Physical state
Liquid

Form
Liquid

Color
Black

Odor
Tar-like

Odor threshold
Not available

pH
2.1 - 4

Melting point/freezing point
150 - 180 °F (65.56 - 82.22 °C) / -173.6 °F (-114.22 °C) estimated

Initial boiling point and boiling range
212°F (100°C)

Flash point
400.0 °F (204.4 °C) Cleveland Open Cup

Evaporation rate
< 1

Flammability (solid, gas)
Not available

Upper/lower flammability or explosive limits

Flammability limit – lower (%)
Not available

Flammability limit – upper (%)
Not available

Explosive limit – lower (%)
Not available

Explosive limit – upper (%)
Not available

Vapor pressure
< 1 mm Hg @ 70°C

Vapor density
> 1

Relative density
Not available

Solubility(ies)

Solubility (water)
Not available

Partition coefficient (n-octanol/water)
Not available

Auto-ignition temperature
> 700°F (> 371.11°C)

Decomposition temperature
Not available

Viscosity
20 – 100 Saybolt Furol

Viscosity temperature
77°F (25° C)

Other information

Flammability class
Flammable IIIB

Percent Volatile
< 2%

Specific gravity
1.0 - 1.03
10. Stability and reactivity

Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport
Chemical stability  Stable at normal temperature conditions
Possibility of hazardous reactions  Hazardous polymerization does not occur
Conditions to avoid  Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not overheat product.
Incompatible materials  Strong oxidizing agents
Hazardous decomposition  Upon decomposition, this product may yield sulfur dioxide, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Hydrogen sulfide.

11. Toxicological information

Information on likely routes of exposure

Ingestion  Expected to be a low ingestion hazard.
Inhalation  Prolonged inhalation may be harmful.
Skin contact  No adverse effects due to skin contact are expected.
Eye contact  Harmful in contact with eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity  Not available

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT EMULSION (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>79142.8594 ppm, 1 Hours estimated</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>2390 g/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>64285.7148 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>2140 g/kg estimated</td>
</tr>
<tr>
<td>Components</td>
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<td></td>
</tr>
<tr>
<td>HYDROCHLORIC ACID (CAS 7647-01-0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>1449 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1108 ppm, 1 Hours</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>3124 ppm, 1 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>900 mg/kg</td>
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<tr>
<td>Other</td>
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<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Mouse</td>
<td>1449 mg/kg</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation  Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation  Harmful in contact with eyes. None known.
Respiratory or skin sensitization
Respiratory sensitization Not available
Skin sensitization May cause skin disorders if contact is repeated or prolonged.
Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic
Carcinogenicity Risk of cancer cannot be excluded with prolonged exposure. IARC: occupational exposures to straight-run bitumen’s and their emissions during road paving are "possibly carcinogenic to humans" (Group 2B)

IARC Monographs. Overall Evaluation of Carcinogenicity
- ASPHALT (CAS 8052-42-4) 2B Possibly carcinogenic to humans
- HYDROCHLORIC ACID (CAS 7647-01-0) 3 Not classifiable as to carcinogenicity to humans.

- Not listed

Reproductive toxicity Not classified
Specific target organ toxicity - single exposure Not classified
Specific target organ toxicity - repeat exposure Not available
Aspiration hazard Not classified
Chronic effects Prolonged exposure may cause chronic effects

12. Ecological information
Ecotoxicity Not expected to be harmful to aquatic organisms

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASPHALT EMULSION (CAS Mixture)</td>
<td>Fish</td>
<td>LC50 Fish 2437.7026 mg/l, 96 hours estimated</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID (CAS 7647-01-0)</td>
<td>Aquatic FISH</td>
<td>LC50 Western Mosquitofish (Gambusia affinis) 282 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

*Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product
Bio-accumulative potential Not available
Mobility in soil Not available
Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations
Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations. No components are identified as hazardous wastes. Disposal recommendations are based on uncontaminated material.
Local disposal regulations Dispose in accordance with all applicable regulations.
Hazardous waste code D001: Waste Flammable material with a flash point <140° F
Waste from residues/unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. (see: Disposal instruction). Avoid discharge into water courses or onto the ground.
Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
### 14. Transport information

**DOT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>DOT UN number</td>
<td>Not Regulated as dangerous goods</td>
</tr>
<tr>
<td>DOT UN proper shipping name</td>
<td>ASPHALT EMULSION</td>
</tr>
<tr>
<td>DOT Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>DOT Class</td>
<td>Not Regulated as dangerous goods</td>
</tr>
<tr>
<td>DOT Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>DOT Label(s)</td>
<td>Not Regulated as dangerous goods</td>
</tr>
<tr>
<td>DOT Packing group</td>
<td>None</td>
</tr>
<tr>
<td>DOT Special precautions for user</td>
<td>Not available</td>
</tr>
<tr>
<td>DOT Special provisions</td>
<td>None</td>
</tr>
<tr>
<td>DOT Packaging exceptions</td>
<td>none</td>
</tr>
<tr>
<td>DOT Packaging non bulk</td>
<td>None</td>
</tr>
<tr>
<td>DOT Packaging bulk</td>
<td>none</td>
</tr>
</tbody>
</table>

**IATA**

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>IATA UN number</td>
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<tr>
<td>IATA UN proper shipping name</td>
<td>ASPHALT EMULSION</td>
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<tr>
<td>IATA Transport hazard class(es)</td>
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<tr>
<td>IATA Class</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IATA Subsidiary risk</td>
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<tr>
<td>IATA Packing group</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IATA Environmental hazards</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IATA ERG Code</td>
<td>Not available</td>
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<tr>
<td>IATA Special precautions for user</td>
<td>Not available</td>
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<tr>
<td>IATA Other information</td>
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<tr>
<td>IATA Passenger and cargo</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IATA Aircraft</td>
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<tr>
<td>IATA Cargo aircraft only</td>
<td>Not Regulated as dangerous goods</td>
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**IMDG**

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<th>Description</th>
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<td>IMDG Transport hazard class(es)</td>
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<td>IMDG Class</td>
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<tr>
<td>IMDG Subsidiary risk</td>
<td>-</td>
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<tr>
<td>IMDG Packing group</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IMDG Environmental hazards</td>
<td>Not Regulated as dangerous goods</td>
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<tr>
<td>IMDG Marine pollutant</td>
<td>No</td>
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<tr>
<td>IMDG EmS</td>
<td>Not available</td>
</tr>
<tr>
<td>IMDG Special precautions for user</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Transport in bulk according to**

- Annex II of MARPOL 73/78
- And the IBC Code

### 15. Regulatory information

**US federal regulations**

All components are on the U.S. EPA TSCA Inventory List.
Material name: DISSCO® Paviseal Emulsified Asphalt Seal Coating

SDS US

Version #: 03    Issue date: 2019-05-20

DISSCO® Denver Industrial Sales and Service Co.
Ph: 303-935-2485         www.dissco.net

TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D)
Not regulated

CERCLA Hazardous Substance List (40 CFR 302.4)
ASPHALT (CAS 8052-42-4)       Listed
HYDROCHLORIC ACID (CAS 7647-01-0)  Listed

US EPCRA Section 304 Extremely Haz. Subs. & CERCLA Haz. Subs.: Section 304 EHS reportable quantity
HYDROCHLORIC ACID (CAS 7647-01-0)  5000 lbs.

US. OSHA Specifically Regulated Substances (29CFR 1910.1001-1050)
Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard – Yes
Delayed Hazard – No
Fire Hazard – Yes
Pressure Hazard – No
Reactivity Hazard – No

SARA 302 Extremely hazardous substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Reportable quantity</th>
<th>Threshold planning quantity, lower value</th>
<th>Threshold planning quantity, upper value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>7647-01-0</td>
<td>5000</td>
<td>500 lbs</td>
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SARA 311/312 Hazardous chemical

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>7647-01-0</td>
<td>&lt; 2</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
HYDROCHLORIC ACID (CAS 7647-01-0)

Clean Air Act (CAA) Section 112® Accidental Release Prevention (40 CFR 68.130)
HYDROCHLORIC ACID (CAS 7647-01-0)

Safe Drinking Water Act    Not Regulated (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2)
HYDROCHLORIC ACID (CAS 7647-01-0)

DEA Essential Chemical Code Number
HYDROCHLORIC ACID (CAS 7647-01-0)  6545

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
HYDROCHLORIC ACID (CAS 7647-01-0)  20 %WV

DEA Exempt Chemical Mixtures Code Number
HYDROCHLORIC ACID (CAS 7647-01-0)  6545

US state regulations

WARNING: This product contains a chemical known to the State of California to cause cancer

US Massachusetts RTK – Substance List
ASPHALT (CAS 8052-42-4)
HYDROCHLORIC ACID (CAS 7647-01-0)

US New Jersey Worker and Community Right-to-Know Act
HYDROCHLORIC ACID (CAS 7647-01-0)  500 Lbs.

US Pennsylvania RTK – Hazardous Substances
ASPHALT (CAS 8052-42-4)
HYDROCHLORIC ACID (CAS 7647-01-0)

US Rhode Island RTK

HYDROCHLORIC ACID (CAS 7647-01-0)

US California Proposition 65

US – California Proposition 65 – CRT: Listed date/Carcinogenic substance

ASPHALT (CAS 8052-42-4) Listed: January 1, 1990

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

Issue date 12-11-2014
Revision date 05-20-2019
Version # 01

References
ACGIH
EPA: AQUIEW database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information
Composition / Information on Ingredients: Disclosure Overrides
Physical & Chemical Properties: Multiple Properties
GHS: Classification

DISSCO®
Denver Industrial Sales and Service Co.
Ph: 303-935-2485 www.dissco.net