

Blockade**SAFETY DATA SHEET**

Preparation Date: 05-Aug-2008

Revision Date: 29-May-2015

Revision Number: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product Identifier****Product Name** Blockade**Other means of identification****Item#:** 0142**Synonyms** None**Recommended use of the chemical and restrictions on use****Recommended use** Barrier Teat Dip, Restricted to professional users**Uses advised against** No information available**Details of the supplier of the safety data sheet****Supplier** DeLaval Manufacturing
11100 N. Congress Ave.
Kansas City, MO 64153

Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION**Classification****OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label Elements**Emergency Overview****Appearance** Brown **Physical state** Liquid **Odor** No information available**Hazards not otherwise classified (HNOC)****Other Information**

• Harmful to aquatic life

Unknown Acute Toxicity

0.35% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % | Trade Secret |
|---------------|-----------|----------|--------------|
| Iodine | 7553-56-2 | 0 - 10% | * |
| Glycerol | 56-81-5 | 10 - 20% | * |

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

FIRST AID MEASURES

| | |
|---------------------|--|
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, get medical advice/attention. |
| Skin contact | Wash off with plenty of water. |
| Inhalation | Move to fresh air. |
| Ingestion | Call a physician or Poison Control Centre immediately. |

Most important symptoms and effects, both acute and delayed

| | |
|--|--|
| Most Important Symptoms and Effects | According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified. |
|--|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

No information available.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

| | |
|-----------------|---|
| Handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. |
|-----------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------------|--|
| Storage | Keep containers tightly closed in a dry, cool and well-ventilated place. Do not freeze. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using. |
| Incompatible Materials | strong oxidizing agents, strong acids, strong bases |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Keep out of the reach of children

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------|--------------------------------|--|------------|
| Iodine 7553-56-2 | TWA: 0.01 ppm STEL: 0.1 ppm | Ceiling: 0.1 ppm Ceiling: 1 mg/m ³ | 2 ppm |
| Glycerol 56-81-5 | | TWA: 10 mg/m ³ TWA: 5 mg/m ³ TWA: 15 mg/m ³ | |

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection No special technical protective measures are necessary.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | Liquid | Odor | No information available |
| Appearance | Brown | Odor Threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks/ Method</u> |
|---|--------------------------|------------------------|
| pH | 4 - 6 | |
| Melting point/freezing point | No information available | |
| Boiling Point/Range | No information available | |
| Flash Point | No information available | |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit | No information available | |
| Lower flammability limit | No information available | |
| Vapor Pressure | No information available | |
| Vapor Density | No information available | |
| Specific Gravity | 1.05 | |
| Water Solubility | soluble | |
| Solubility in other solvents | No information available | |
| Partition coefficient: n-octanol/water | No information available | |
| Autoignition Temperature | No information available | |
| Decomposition temperature | No information available | |
| Viscosity of Product | No information available | |
| Dynamic viscosity | No information available | |
| Explosive Properties | No information available | |
| Oxidizing Properties | No information available | |

Other information

| | |
|-------------------------|--------------------------|
| Softening Point | No information available |
| Molecular Weight | No information available |
| VOC Content | No information available |
| Density | 8.7 lb/gal |
| Bulk Density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

strong oxidizing agents, strong acids, strong bases

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|---------------------|--------------------|
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin contact | No data available. |
| Ingestion | No data available. |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---------------------|-----------------------|---------------------|-------------------------------------|
| Iodine 7553-56-2 | 14000 mg/Kg | - | 137 ppm 4.588 mg/L |
| Glycerol 56-81-5 | = 12600 mg/kg (Rat) | 21900 mg/kg (Rat) | > 570 mg/m ³ (Rat) 1 h |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic effects No information available.
Carcinogenicity No information available.

Reproductive Effects No information available.
STOT - single exposure No information available.
STOT-repeated exposure No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.35% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

5.23% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Fish | Microtox | Waterflea |
|---------------------|----------------------|---|----------|--------------------------------------|
| Iodine 7553-56-2 | - | LC50 (96 h) 0.53 mg/L | - | LC50 (48 h) 0.16 mg/L |
| Glycerol 56-81-5 | - | 51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static | - | 500: 24 h Daphnia magna mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------------|-----------------------|
| Glycerol 56-81-5 | -1.76 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|-------------------------------|---|
| Waste Disposal Method | Dispose of in accordance with local regulations. |
| Contaminated Packaging | Empty containers should be taken for local recycling, recovery or waste disposal. |

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|-----------------|
| TSCA | TSCA |
| DSL/NDSL | DSL/NDSL |
| EINECS/ELINCS | Does not Comply |
| ENCS | Does not Comply |
| CHINA | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

NFPA **Health** 1 **Flammability** 0 **Instability** 0 **Physical Hazard** -

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Revision Date: 29-May-2015

Revision Note

No information available

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of SDS