1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier
   Product Name: Udder Dyne

Other means of identification
   Item#: 7508
   Synonyms: None

Recommended use of the chemical and restrictions on use
   Recommended use: Restricted to professional users, Udder wash
   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

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
   This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Skin Corrosion/Irritation</th>
<th>Category 1 Sub-category B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Corrosive to metals</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Label Elements

DANGER

Hazard Statements
   Causes severe skin burns and eye damage
   May cause respiratory irritation. May cause drowsiness or dizziness
   May be corrosive to metals

Emergency Overview

Appearance: Dark brown  Physical state: Liquid  Odor: No information available
Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Other Information
* Harmful to aquatic life
Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine</td>
<td>7553-56-2</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>7664-38-2</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
</tbody>
</table>

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

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.

Skin contact
Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.

Inhalation
Move to fresh air.

Ingestion
Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

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
The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products
Thermal decomposition can lead to release of irritating gases and vapours.

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 skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions
Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Handling
Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities
Storage
Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials
bases, bleach

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Keep out of the reach of children

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine 7553-56-2</td>
<td>TWA: 0.01 ppm</td>
<td>Ceiling: 0.1 ppm</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL: 0.1 ppm</td>
<td>Ceiling: 1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Phosphoric acid 7664-38-2</td>
<td>TWA: 1 mg/m³</td>
<td>TWA: 1 mg/m³</td>
<td>1000 mg/m³</td>
</tr>
<tr>
<td></td>
<td>STEL: 3 mg/m³</td>
<td>STEL: 3 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls
Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment
Eye/face Protection
Goggles.
Skin and body protection

Wear protective gloves and protective clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks/ Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Dark brown</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity of Product</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

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     |                                          |

Dynamic viscosity                | 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**
bases, bleach

**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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine 7553-56-2</td>
<td>14000 mg/Kg</td>
<td>-</td>
<td>137 ppm</td>
</tr>
<tr>
<td>Phosphoric acid 7664-38-2</td>
<td>= 1530 mg/kg (Rat)</td>
<td>2730 mg/kg (Rabbit)</td>
<td>850 mg/m^3 (Rat) 1 h</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

- **Symptoms**
  No information available.

- **Delayed and immediate effects as well as chronic effects from short and long-term exposure**
  No information available.

- **Sensitization**
  No information available.

- **Mutagenic effects**
  No information available.

- **Carcinogenicity**
  Contains no ingredient listed as a carcinogen.

- **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% 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**

12.6% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Microtox</th>
<th>Waterlea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine 7553-56-2</td>
<td>-</td>
<td>LC50 (96 h) 0.53 mg/L</td>
<td>-</td>
<td>0.16 mg/L</td>
</tr>
<tr>
<td>Phosphoric acid 7664-38-2</td>
<td>-</td>
<td>3 - 3.5: 96 h Gambusia affinis mg/L LC50</td>
<td>-</td>
<td>4.6: 12 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method
Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging
Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT

UN-No 3264
Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s (Phosphoric acid)
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Complies</th>
<th>Does not Comply</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>TSCA</td>
<td></td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>DSL/NDSL</td>
<td></td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Complies</td>
<td></td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not Comply</td>
<td></td>
</tr>
<tr>
<td>CHINA</td>
<td>Complies</td>
<td></td>
</tr>
<tr>
<td>KECL</td>
<td>Complies</td>
<td></td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
<td></td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
<td></td>
</tr>
</tbody>
</table>

Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid 7664-38-2</td>
<td>5000 lb</td>
<td>-</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

Chemical Name | RQ | CERCLA EHS RQs | RQ |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphoric acid 7664-38-2</td>
<td>5000</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Preparation Date: 13-Aug-2008
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