

# Dairy MSR 50

Preparation Date: 21-Dec-2007

Revision Date: 13-Dec-2018

# SAFETY DATA SHEET

Revision Number: 3

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

### Product Identifier

**Product Name** Dairy MSR 50

### Other means of identification

**Item#:** 7440

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Restricted to professional users

**Uses advised against** All other

### 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 considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                   |             |
|-----------------------------------|-------------|
| Skin Corrosion/Irritation         | Category 1  |
| Serious eye damage/eye irritation | Category 1  |
| Carcinogenicity                   | Category 1A |

Sulfuric acid and other mineral acids mist statement

The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mists containing sulfuric acid" as a known human carcinogen, (IARC category 1). This classification applies only to mists containing sulfuric acid and not to sulfuric acid or sulfuric acid solutions.

|                     |            |
|---------------------|------------|
| Corrosive to metals | Category 1 |
|---------------------|------------|

### Label Elements

#### **Emergency Overview**

**DANGER**

#### **Hazard Statements**

Causes severe skin burns and eye damage

May cause cancer

May be corrosive to metals



|                       |                              |                                      |
|-----------------------|------------------------------|--------------------------------------|
| <b>Appearance</b> Red | <b>Physical state</b> Liquid | <b>Odor</b> No information available |
|-----------------------|------------------------------|--------------------------------------|

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling

**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.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical name   | CAS No.   | Weight-% |
|-----------------|-----------|----------|
| Sulfuric acid   | 7664-93-9 | 9        |
| Phosphoric acid | 7664-38-2 | 10 - 20  |

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of 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. Get medical attention immediately if symptoms occur.

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

**Most important symptoms and effects, both acute and delayed**

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

**Indication of any immediate medical attention and special treatment needed**

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.

**Sensitivity to static discharge** None.

### 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.

**NFPA**

**Health hazards** 3

**Flammability** 0

**Instability** 0

## 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. Store locked up.

#### **Incompatible Materials**

bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

| Chemical name                | ACGIH TLV   | OSHA PEL  | NIOSH IDLH             |
|------------------------------|---|---|------------------------|
| Sulfuric acid<br>7664-93-9   | TWA: 0.2 mg/m <sup>3</sup>                            | TWA: 1 mg/m <sup>3</sup>                              | 15 mg/m <sup>3</sup>   |
| Phosphoric acid<br>7664-38-2 | TWA: 1 mg/m <sup>3</sup><br>STEL: 3 mg/m <sup>3</sup> | TWA: 1 mg/m <sup>3</sup><br>STEL: 3 mg/m <sup>3</sup> | 1000 mg/m <sup>3</sup> |

### Appropriate engineering controls

#### **Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

### Individual protection measures, such as personal protective equipment

#### **Eye/face Protection**

Goggles.

|                                       |   |
|---------------------------------------|---|
| <b>Skin and body protection</b>       | Wear protective gloves and protective clothing.   |
| <b>Respiratory Protection</b>         | In case of inadequate ventilation wear respiratory protection.  |
| <b>General Hygiene Considerations</b> | 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

|                       |        |                       |                          |
|-----------------------|--------|-----------------------|--------------------------|
| <b>Physical state</b> | Liquid | <b>Odor</b>           | No information available |
| <b>Appearance</b>     | Red    | <b>Odor Threshold</b> | No information available |

| <u>Property</u>                     | <u>Values</u>            | <u>Remarks/ Method</u> |
|-------------------------------------|--------------------------|------------------------|
| <b>pH</b>                           | No information available |                        |
| <b>Melting point/freezing point</b> | No information available |                        |
| <b>Boiling Point/Range</b>          | No information available |                        |
| <b>Flash Point</b>                  | No information available |                        |
| <b>Evaporation rate</b>             | No information available |                        |
| <b>Flammability (solid, gas)</b>    | No information available |                        |
| <b>Flammability Limit in Air</b>    |                          |                        |
| <b>Upper flammability limit</b>     | No information available |                        |
| <b>Lower flammability limit</b>     | No information available |                        |
| <b>Vapor Pressure</b>               | No information available |                        |
| <b>Vapor Density</b>                | No information available |                        |
| <b>Specific Gravity</b>             | 1.12                     |                        |
| <b>Water Solubility</b>             | soluble                  |                        |

|   |                          |
|---|--------------------------|
| <b>Partition coefficient: n-octanol/water</b> | No information available |
| <b>Autoignition Temperature</b>               | No information available |
| <b>Decomposition temperature</b>              | No information available |
| <b>Viscosity of Product</b>                   | No information available |
| <b>Dynamic viscosity</b>                      | No information available |

### Other information

|                       |            |
|-----------------------|------------|
| <b>Liquid Density</b> | 9.3 lb/gal |
|-----------------------|------------|

## 10. STABILITY AND REACTIVITY

### Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

### Chemical Stability

Stable under normal conditions.

### Possibility of hazardous reactions

Gives off hydrogen by reaction with some metals (e.g. aluminum).

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

bases, light metals (e.g. aluminum, copper, brass, zinc galvanized), bleach

### Hazardous decomposition products

None known.

## 11. TOXICOLOGICAL INFORMATION

**Principal Routes of Exposure** Eye contact, Skin contact, Ingestion

**Information on likely routes of exposure**

**Eyes** Corrosive to the eyes and may cause severe damage including blindness.  
**Skin** Extremely corrosive and destructive to tissue.  
**Ingestion** Ingestion causes burns of the upper digestive and respiratory tracts.

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

**Sensitization** None known.  
**Mutagenic effects** None known.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name              | ACGIH | IARC    | NTP   | OSHA |
|----------------------------|-------|---------|-------|------|
| Sulfuric acid<br>7664-93-9 | A2    | Group 1 | Known | X    |

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

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**Reproductive Effects** None known.  
**STOT - single exposure** None known.  
**STOT - repeated exposure** None known.  
**Aspiration Hazard** None known.

**Numerical measures of toxicity**

If available, toxicity values of individual components are shown below.

| Chemical name                | LD50 Oral            | LD50 Dermal           | LC50 Inhalation                        |
|------------------------------|----------------------|-----------------------|--|
| Sulfuric acid<br>7664-93-9   | = 2140 mg/kg ( Rat ) | No data available     | 85 - 103 mg/m <sup>3</sup> ( Rat ) 1 h |
| Phosphoric acid<br>7664-38-2 | = 1530 mg/kg ( Rat ) | 2730 mg/kg ( Rabbit ) | 850 mg/m <sup>3</sup> ( Rat ) 1 h      |

0% of the mixture consists of ingredient(s) of unknown toxicity

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

If available, ecotoxicity values of individual components are shown below.

| Chemical name                | Algae/aquatic plants | Fish                                     | Microtox          | Waterflea                         |
|------------------------------|----------------------|--|-------------------|-----------------------------------|
| Sulfuric acid<br>7664-93-9   | No data available    | LC50 42 mg/l 96 h                        | No data available | EC50 42.5 mg/L 48 h               |
| Phosphoric acid<br>7664-38-2 | No data available    | 3 - 3.5: 96 h Gambusia affinis mg/L LC50 | No data available | 4.6: 12 h Daphnia magna mg/L EC50 |

**Persistence and degradability**

No information available.

**Bioaccumulation/Accumulation**

No information available.

**Other adverse effects**

No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

|                               |   |
|-------------------------------|---|
| <b>Waste Disposal Method</b>  | Dispose of in accordance with local regulations. Should not be released into the environment. |
| <b>Contaminated Packaging</b> | Empty containers should be taken for local recycling, recovery or waste disposal.             |

### 14. TRANSPORT INFORMATION

#### DOT

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

### 15. REGULATORY INFORMATION

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA) - Section 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

Sulfuric acid (CAS# 7664-93-9)

#### State Regulations

| Chemical name                | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Sulfuric acid<br>7664-93-9   | X          | X             | X            |
| Phosphoric acid<br>7664-38-2 | X          | X             | X            |

#### U.S. EPA Label information

**EPA Pesticide registration number** Not applicable

### 16. OTHER INFORMATION

**Preparation Date:** 21-Dec-2007  
**Revision Date:** 13-Dec-2018  
**Revision Note:** None

#### 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.

**End of SDS**