

Rapidyne - see 0591/1876

SAFETY DATA SHEET

Preparation Date: 31-Jul-2008

Revision Date: 19-Feb-2015

Revision Number: 1

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

Product Identifier

Product Name Rapidyne - see 0591/1876

Other means of identification

Item#: 1876

UN-No 3264

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available.

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

| | |
|--|---------------------------|
| Skin Corrosion/Irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Corrosive to metals | Category 1 |

Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage

May cause respiratory irritation. May cause drowsiness or dizziness

May be corrosive to metals

**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**

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity

0.2% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % | Trade Secret |
|-----------------|------------|----------|--------------|
| Hydriodic acid | 10034-85-2 | 0 - 10% | * |
| Iodine | 7553-56-2 | 0 - 10% | * |
| Phosphoric acid | 7664-38-2 | 20 - 30% | * |

* 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

| | |
|-------------------------------------|--|
| 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 Decomposition by contact with water may generate vapours which can be ignited by heat or open flame.

Specific hazards arising from the chemical

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

Explosion Data**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**

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| Personal precautions | Avoid contact with skin, eyes and clothing. Use personal protective equipment. |
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Environmental Precautions

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

Methods and material for containment and cleaning up

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

7. HANDLING AND STORAGE**Precautions for Safe Handling**

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|----------|---|
| Handling | Avoid contact with skin, eyes and clothing. |
|----------|---|

Conditions for safe storage, including any incompatibilities

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|---------|--|
| Storage | Keep containers tightly closed in a dry, cool and well-ventilated place. |
|---------|--|

| | |
|------------------------|---|
| Incompatible Materials | bases. organic materials. light metals. bleach. |
|------------------------|---|

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

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|-----------------------------------|---|
| Keep out of the reach of children | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|-----------------------------------|---|

| 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 |
| Phosphoric acid 7664-38-2 | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | 1000 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 | Goggles. |
| Skin and body protection | No special technical protective measures are necessary. |
| 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

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

| <u>Property</u> | <u>Values</u> | <u>Remarks/ • Method</u> |
|--|--------------------------|--------------------------|
| pH | 1.5 | |
| 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 | 1.23 | |
| 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 | 10.3 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

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

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

bases, organic materials, light metals, bleach.

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|--------------------|
| Product Information | No data available |
| 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 |
| Phosphoric acid 7664-38-2 | = 1530 mg/kg (Rat) | 2730 mg/kg (Rabbit) | 850 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 0.2% 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

21.5% of the mixture consists of components(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 |
| Phosphoric acid 7664-38-2 | - | 3 - 3.5: 96 h Gambusia affinis mg/L LC50 | - | 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**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

| | |
|----------------------|-----------------|
| 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

Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous**Categorization**

| | |
|-----------------------------------|----|
| Acute Health Hazard | No |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Phosphoric acid 7664-38-2 | 5000 lb | - | - | X |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical Name | RQ | CERCLA EHS RQs | RQ |
|------------------------------|------|----------------|--|
| Phosphoric acid 7664-38-2 | 5000 | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

State Right-to-Know**U.S. EPA Label information**

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

| | | | | |
|-------------|----------|----------------|--------------------|-----------------------|
| NFPA | Health 3 | Flammability 0 | Instability 0 | Physical Hazard - |
| HMIS | Health 0 | Flammability 0 | Physical hazards 0 | Personal Protection X |

Preparation Date: 31-Jul-2008

Revision Date: 19-Feb-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