

Zone III

SAFETY DATA SHEET

Preparation Date: 28-Oct-2015

Revision Date: 11-Feb-2016

Revision Number: 5

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

Product Identifier

Product Name Zone III

Other means of identification

Item#: 1145

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Cleaning agent

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
Corrosive to metals	Category 1

Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes severe skin burns and eye damage

May be corrosive to metals



Appearance Colorless to slightly yellow

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
Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
Specific treatment (see First Aid on this label)

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.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up
Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Phosphoric acid	7664-38-2	10 - 20
Methane sulfonic acid	75-75-2	1 - 10

If a concentration range is shown, the exact concentration 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. Get medical attention immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Do not induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

The product is not flammable. 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

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

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 3

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. For personal protection see section 8.

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. Keep out of the reach of children. Store locked up. Store in corrosive resistant container with a resistant inner liner.

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
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

Wear protective gloves and protective clothing.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

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

Physical state	Liquid	Odor	No information available
Appearance	Colorless to slightly yellow	Odor Threshold	No information available
Property	Values	Remarks/ Method	
pH	2		
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	1.12		
Water Solubility	soluble		
Partition coefficient: n-octanol/water	No information available		
Autoignition Temperature	No information available		
Decomposition temperature	No information available		
Viscosity of Product	No information available		

Other information

Density 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. Exposure to light may cause fading of dyed products.

Possibility of hazardous reactions

May spatter and release heat if mixed with bases (alkalis). Mixing with chlorinated products may release deadly chlorine gas. May react with and cause damage to soft metals such as aluminum, copper, brass or zinc (galvanized) to produce flammable, potentially explosive, hydrogen gas.

Conditions to Avoid

Product may degrade if exposed to long-term high temperature.

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.
Inhalation May cause irritation of respiratory tract.

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

Skin Corrosion/Irritation Causes burns.
Serious eye damage/eye irritation Causes eye burns.
Sensitization None known.
Mutagenic effects None known.
Carcinogenicity Contains no ingredient listed as a carcinogen.

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
Phosphoric acid 7664-38-2	= 1530 mg/kg (Rat)	2730 mg/kg (Rabbit)	850 mg/m ³ (Rat) 1 h
Methane sulfonic acid 75-75-2	= 380 mg/kg (Rat) = 200 mg/kg (Rat)	= 200 mg/kg (Rabbit)	No data available

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
Phosphoric acid 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
Methane sulfonic acid 75-75-2	No data available	No data available	No data available	12: 48 h Daphnia pulex 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 Contact your local waste disposal authority for advice, or pass to a chemical disposal company.

Contaminated Packaging Triple rinse containers. Avoid contamination of any water supply with product or empty 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, Methanesulfonic Acid)
Hazard Class 8
Packing Group II

15. REGULATORY INFORMATION

State Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric acid 7664-38-2	X	X	X
Methane sulfonic acid 75-75-2	X	Not Listed	Not Listed

16. OTHER INFORMATION

Preparation Date: 28-Oct-2015

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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.

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