

Membrane Additive

SAFETY DATA SHEET

Preparation Date: 28-Oct-2010 Revision Date: 28-May-2015 Revision Number: 2

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

Product Identifier

Product Name Membrane Additive

Other means of identification

Item#:2006SynonymsNone

Recommended use of the chemical and restrictions on use

Recommended use Concentrated surfactant additive, especially for improvement of detergency and wetting in

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

Acute Toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label Elements

Emergency Overview

DANGER

Hazard Statements

Causes serious eye damage Causes skin irritation Harmful if swallowed Harmful to aquatic life



Appearance Colorless to slightly yellow Physical state Liquid Odor Slight

Precautionary Statements - Prevention

Wear protective gloves
Wear eye/face protection
Avoid release to the environment
Do not eat, drink or smoke when using this product

Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

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: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade Secret
Ethoxylated alcohols	TRADE SECRET	60 - 70%	*
Alcohol ethoxylate	TRADE SECRET	10 - 20%	*

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

4. FIRST AID MEASURES

FIRST AID MEASURES

General Advice Take off contaminated clothing and shoes immediately.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water. Get medical attention if irritation

develops and persists.

Inhalation Move to fresh air. Call a physician immediately. Oxygen or artificial respiration if needed.

Ingestion Rinse mouth. Drink plenty of water. Do not induce vomiting. Immediate medical attention is

required.

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

Water spray, Dry powder, Foam

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

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

Protective Equipment and Precautions for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods and material for containment and cleaning up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Do not freeze. Keep container tightly closed. Keep cool and protect from sunlight.

Incompatible Materials No information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Keep out of the reach of children

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face Protection Tightly fitting safety 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

Physical state Liquid

Appearance Colorless to slightly yellow Odor Slight

Color No information available Odor Threshold No information available

Remarks/ Method

<u>Property</u> <u>Values</u>

pH 5 - 8

Melting point/freezing point No information available

Boiling Point/Range

Flash Point

Evaporation rate

Flammability (solid, gas)

Flammability Limit in Air

No information available

> 64.4 °C / > 148 °F

No information available

No information available

Upper flammability limit
Lower flammability limit
Vapor Pressure
Vapor Density
Specific Gravity

No information available
No information available
No information available
No information available

Water Solubility soluble

Solubility in other solvents
Partition coefficient: n-octanol/waterNo information available
Autoignition Temperature
Decomposition temperature
Viscosity of Product
Dynamic viscosity
Explosive Properties
No information available

Other information

Softening PointNo information availableMolecular WeightNo information availableVOC ContentNo information available

Density 1.02 g/cm3

Bulk Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

No information available

Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO2). None under normal use.

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.

Information on toxicological effects

Symptoms No information available.

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

Irritation Skin irritation: rabbit: Irritant. OECD 404:. Eye,rabbit:. Risk of serious damage to eyes.

OECD 405:.

SensitizationNo information available.Mutagenic effectsNo information available.CarcinogenicityNo information available.

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

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

LD50 Oral: LD50/oral/rat = 500 - 2000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

Test Method: mod. OECD 303A. Method of analysis: Bismuth-active substance. Degree of elimination: >=90%. Test method: OECD 301B; ISO 9439; 92/69/EEC, C.4-C. Method of analysis: CO2 formation relative to the theoretical value. Degree of elimination: >60% (28d).

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 Dispose of in accordance with local regulations. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA TSCA DSL/NDSL DSL/NDSL **EINECS/ELINCS** Does not Comply Does not Comply **ENCS CHINA** Does not Comply Does not Comply **KECL** Does not Comply **PICCS** Does not Comply **AICS**

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

WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

State Regulations

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. OTHER INFORMATION

NFPA Health 3 Flammability 1 Instability 0 Physical Hazard -

Prepared By DeLaval Manufacturing

11100 N. Congress Ave. Kansas City, MO 64153 USA

1-816-891-7700 28-Oct-2010 28-May-2015

Revision Note

Preparation Date:

Revision Date:

No information available

Disclaimer

The information provided on this SDS 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