Stepan 5

SAFETY DATA SHEET

1. Identification

Product identifier

MERPOL SE

Other means of identification

Product code

2086

Recommended use

Surfactant

Recommended restrictions

For industrial use only.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Stepan Company

Address

22 West Frontage Road Northfield, IL 60093

USA

Telephone

General

1-847-446-7500

E-mail

Not available.

Medical

1-800-228-5635

Emergency phone number Chemtrec

1-800-424-9300 +1 703-527-3887

Chemtrec Int'l

2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2A

Environmental hazards

Hazardous to the aquatic environment, acute

Category 2

hazard

Hazardous to the aquatic environment,

Category 3

long-term hazard

OSHA defined hazards

Not classified.

Label elements



Signal word

Warning

Hazard statement

Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

Wear eye/face protection. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves.

Response

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see this label). If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical

advice/attention. Take off contaminated clothing and wash before reuse.

Storage

Store away from incompatible materials.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%	
_Alkoxylated alcohol*		Proprietary*	95 - 100	
Water		7732-18-5	0 - 5	

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting without advice from

Ingestion poison control center.

Most important symptoms/effects, acute and delayed

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain,

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

Move containers from fire area if you can do so without risk.

equipment/instructions Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water, Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment, Do not empty into drains.

Conditions for safe storage, including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see Section 10

of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering

Ensure adequate ventilation, especially in confined areas. Eye wash facilities and emergency shower must be available when handling this product.

controls

Individual protection measures, such as personal protective equipment

Eve/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Wear protective gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Clear to slightly hazy.

Physical state

Liquid.

Form

Not available.

Color

Colourless to light yellow.

Odor

Mild.

Odor threshold

Not available.

6 - 8 (10% aqueous @ 25C)

Melting point/freezing point

Not available.

Initial boiling point and boiling

Not available.

range

Flash point

> 200.0 °F (> 93.3 °C) Pensky-Martens Closed Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

Not available.

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)

Solubility (water)

Soluble to 0.1%

Auto-ignition temperature

Not available. Not available.

Decomposition temperature Viscosity

60 cP @ 25C

Other information

Density

8,10 lb/gal @ 25C

Percent volatile

5 %

10. Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition

products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation

Prolonged inhalation may be harmful.

Skin contact

Causes skin irritation.

Eve contact

Causes serious eye irritation, May be harmful if swallowed.

Ingestion

Not available.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Acute toxicity

Product

Species

Test Results

MERPOL SE

Acute

Dermal

LD50

Rabbit

> 2000 mg/kg

Oral

LD50

Rat

2 - 3.34 g/kg

Skin corrosion/irritation

Serious eye damage/eye

Causes serious eye irritation.

Causes skin irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization

Not available.

Skin sensitization

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not applicable.

Specific target organ toxicity -

repeated exposure

Not applicable.

Aspiration hazard

Not applicable.

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Material name: MERPOL SE

Product		Species	Test Results	
MERPOL SE				
Aquatic				
<i>Acute</i> Algae	EC50	Algae	1 - 10 mg/l, 72 hours	
Crustacea	EC50	Daphnia	1 - 10 mg/l, 48 hours	
Fish	LC50	Fish	1 - 10 mg/l, 96 hours	
ersistence and degradability oaccumulative potential	Readily biodegradable. No data available.			
obility in soil	No data available.			
ther adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.			

13. Disposal considerations

Disposal instructions Hazardous waste code Dispose of contents/container in accordance with local/regional/national/international regulations. The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and Not available.

the IBC Code

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Material name: MERPOL SE

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. Massachusetts RTK - Substance List

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

WARNING: This product may contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm: ethylene oxide (75-21-8).

WARNING: This product may contain a chemical known to the State of California to cause cancer: propylene oxide (75-56-9).

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: ethylene glycol (107-21-1).

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

1,4-dioxane (CAS 123-91-1) Acetaldehyde (CAS 75-07-0) Listed: January 1, 1988 Listed: April 1, 1988

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory (NZIoC)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date

03-19-2015

Revision date

06-06-2016

Version #

02

Material name: MERPOL SE Material ID: 991 Product code: 2086 Version #: 02 Revision date: 06-06-2016 Print date: 06-06-2016

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Revision information

Product and Company Identification: Product and Company Identification

Hazard(s) identification: Prevention

Composition / Information on Ingredients: Ingredients

Composition/information on ingredients: Component information

Physical & Chemical Properties: Multiple Properties

Regulatory information: California Prop 65

Other information, including date of preparation or last revision: Disclaimer

HazReg Data: International Inventories

GHS: Classification