



Silver Fern Chemical, Inc.

SAFETY DATA SHEET

Polysorbate 85

Revision Date 24-Aug-2020

Revision Number 3

1. IDENTIFICATION

Product identifier

Product Name Polysorbate 85

Other means of identification Not available

Recommended use of the chemical and restrictions on use

Recommended Use Industrial use

Uses advised against No information available

Details of the supplier of the safety data sheet

Distributor

Silver Fern Chemical, Inc.
121 W. De La Guerra Street, Suite B
Santa Barbara, CA 93101 USA
Phone: 1-866-282-3384
Info@silverfernchemical.com

24 Hour emergency telephone number

Infotrac 1-800-535-5053 (USA & Canada)

Outside USA & Canada 1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Labeling elements

None needed according to classification criteria.

Other hazards which do not result in classification

Not applicable.

Hazards not otherwise classified (HNOC)

Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substance**

Chemical name	CAS No	Weight-%	Trade secret
Polyoxyethylene sorbitan trioleate	9005-70-3	60 - 100	*

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

4. FIRST AID MEASURES**Description of first aid measures**

Inhalation	Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin contact	Wash with plenty of water. Remove and isolate contaminated clothing and shoes.
Ingestion	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical, CO2, water spray or alcohol-resistant foam.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Not flammable.
Hazardous combustion products	Carbon oxides.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Protect from sunlight. Store in a well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use.
Packaging materials	carbon steel. High density polyethylene.
Incompatible materials	Strong oxidizing agents. Strong reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
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Hand protection	Wear suitable gloves. PVC (polyvinyl chloride). Rubber gloves.
Skin and body protection	PVC apron. Protective shoes or boots.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
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 @25 °C / 77 °F
Color	amber
Odor	No information available
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point or initial boiling point and boiling range	> 100 °C / 212 °F	
Flash point	> 149 °C / 300 °F	
Evaporation rate	No data available	
Flammability	No data available	
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	
Relative vapor density	No data available	
Density and/or relative density	1.000	@25 °C / 77 °F
Water solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition Coefficient (n-octanol/water)	No data available	

Autoignition temperature	No data available
Decomposition temperature	No data available
Kinematic viscosity	No data available
Dynamic viscosity	No data available

Particle characteristics No information available

Other Information

Molecular weight	No information available
VOC Content (%)	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Extremes of temperature and direct sunlight. Keep away from open flames, hot surfaces and sources of ignition. Exposure to air or moisture over prolonged periods.
Incompatible materials	Strong oxidizing agents. Strong reducing agents.
Hazardous decomposition products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Polyoxyethylene sorbitan trioleate 9005-70-3	= 5000 - 38900 mg/kg (Rat)	-	-

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
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	Primary rabbit skin irritation studies using the Draize method were performed with 6 studies showing no signs of irritation, 3 studies showing minimal irritation, and one study showing mild irritation. All of these studies used 100% concentrations of polysorbate.
Serious eye damage/eye irritation	The polysorbates were non-irritating to mildly irritating in both in-vivo and in-vitro ocular irritation assays.
Respiratory or skin sensitization	Not a skin sensitizer. Guinea pig.
Germ cell mutagenicity	Based on available data, the classification criteria are not met. No evidence of mutagenic activity for polysorbates based on bacterial or mammalian gene mutation assays.
Carcinogenicity	The product does not contain any component present at concentration greater than or equal to 0.1% listed as carcinogen/possibly carcinogen for NTP, IARC and OSHA.
Reproductive toxicity	Based on available data, the classification criteria are not met. An in-vivo teratology screening study with polysorbates did not cause developmental toxicity when administered by gavage (2500 mg/kg/day) to pregnant mice on gestational days 8 to 12.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Not considered to be harmful to aquatic life
Persistence and degradability	Expected to be biodegradable.
Bioaccumulative potential	No information available.
Mobility in soil	No information available.
Other adverse effects	No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
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Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

DSL Complies

NDSL Does not comply

Global Inventories Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US 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 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

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).

CERCLA

Hydrogen peroxide is present at 0.1%.

1,4-Dioxane is present below 0.1%.

Ethylene oxide is present below 0.1%.

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Hydrogen peroxide 7722-84-1	-	1000 lb
Ethylene oxide 75-21-8	10 lb	10 lb
1,4-Dioxane 123-91-1	100 lb	-

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical name	California Proposition 65
Ethylene oxide - 75-21-8	Carcinogen Developmental Female Reproductive Male Reproductive
1,4-Dioxane - 123-91-1	Carcinogen

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Hydrogen peroxide 7722-84-1	X	X	-
Ethylene oxide 75-21-8	X	X	X
1,4-Dioxane 123-91-1	X	X	X

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards	Flammability	Instability	Special hazards
	0	1	0	-
HMIS	Health hazards	Flammability	Physical hazards	Personal protection
	0	1	0	X

Revision Date 24-Aug-2020

205287

Revision Note No information available.

Disclaimer

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

End of Safety Data Sheet

Approved - TL 12-19-2023