

MATERIAL SAFETY DATA SHEET

POLYSORBATE 20

MSDS

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: POLYSORBATE 20
Product Use: Personal Care Formulations – Non-Ionic Surfactant
Company Name: Natural Sourcing
Company Address: 341 Christian Street, Oxford, CT 06478, USA
Date Issued: 7/24/2008
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

2. COMPOSITION/INGREDIENT INFORMATION

Chemical Identity: Polysorbate 20, Poe (20) Sorbitan monolaurate
Formula: Ethoxylation of reaction between sorbitol and lauric acid
Components:

	CAS No	% (w/w)	OSHA PEL	ACGIH TLV
Polyoxyethylene (20) Sorbitan monolaurate	9005-64-5	97-100	Not established	Not established

Ingredients not precisely identified are proprietary or nonhazardous. Values are not product specifications.

Exposure Limits: N/A
CAS #: 9005-64-5

3. HAZARDS IDENTIFICATION

HMIS Rating: Health: 0 Flammability: 1 Reactivity: 0

NO HAZARDS ARE KNOWN TO BE ASSOCIATED WITH EXPOSURES TO THIS PRODUCT.

Limited toxicity data are available on this specific product; this hazard assessment is based on the results of screening tests.

Routes of Entry:

- Eyes
- Skin
- Ingestion
- Inhalation

Eye Contact: No irritation is likely to develop following contact with eyes.

Skin Contact: No irritation is likely to develop following contact with skin. This product will probably not be absorbed through human skin.

Ingestion: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract. No toxic effects are expected following ingestion of this product.

Inhalation: No irritation is expected to be associated with inhalation of this material. No toxic effects are known to be associated with inhalation of vapors from this material.

4. FIRST AID MEASURES

Eyes: Flush with plenty of water or eye wash solution for 15 minutes. Get medical attention if redness, itching, or burning occurs.

Skin:	Wash with soap and water- get medical attention if irritation occurs.
Ingestion:	Do not induce vomiting. Give 1-2 glasses of water to drink. Seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation:	Remove to fresh air.
Medical Conditions Generally Aggravated by Exposure:	None

5. FIRE FIGHTING MEASURES

Flash Point (Method Used):	>149°C / 300°F (open cup)
Flammable Limits	LEL: Not Established UEL: Not Established
Auto Ignition Temperature:	No information
Extinguishing Media:	<ul style="list-style-type: none"> • Water Fog • Dry Chemical • Carbon Dioxide • Alcohol Foam
	Note: Use water to cool containers.
Special Firefighting Procedures:	<ul style="list-style-type: none"> • Use air supplied equipment for fighting interior fires. • Wear protective clothing to prevent skin contact • Cool fire exposed containers with water spray.
Unusual Fire & Explosion Hazards:	Not established

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal Protection:	N/A
Environmental Protection:	Notify authorities if large amounts of product enters sewer.
Methods for Cleaning Up:	<ul style="list-style-type: none"> • Absorb onto an inert, absorbent substrate and sweep up. • Wash area with soap and water. Area may be slippery; take precautions.

7. HANDLING AND STORAGE

Handling	
Safe Handling:	Wear safety glasses and gloves.
Storage	
Requirements for Storage Areas and Containers:	Store in a cool, dry location, in original container in a well ventilated area.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls:	Provide adequate ventilation and eye wash stations
Personal Protection	
Eye:	ANZI certified safety glasses should be worn.
Skin/Body:	Lab coats and gloves should be worn.
Respiratory:	Not needed under normal conditions of use. Use adequate ventilation or NIOSH-approved respiratory devices if required for application.
Ventilation:	Handle in well ventilated areas.

Other: Evaluate need based on application. Slip proof shoes may be worn where spills may occur.
Work/Hygiene Practice: Normal work and hygiene practices for handling chemicals

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Clear, pale yellow
Odor: Characteristic, mild
Specific Gravity (H₂O = 1): 1.1 @ 25°C
pH: Neutral
Acid Value: (% oleic) Mg KOH/g
Vapor Pressure (mm Hg.): < 1.0000
Vapor Density (AIR = 1): N/A
Flash Point: >300°F /149°C
Boiling Point: >212° F / 100°C
Solubility in Water: Soluble
Solubility in Other: Soluble in methanol, ethanol, isopropanol, propylene glycol, ethylene glycol, cottonseed oil
Dynamic Viscosity: ~400 @25°C
Freezing Point: ~20°F / ~7°C
% Volatile by Volume: Negligible

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: None
Incompatibility (Materials to Avoid): Avoid strong oxidizers
Hazardous Decomposition or Byproducts: CO & CO₂
Hazardous Polymerization: Will Not Occur

11. TOXICOLOGICAL INFORMATION

Eye Contact: A 100% suspension of this material was tested:
Rabbit Draize 7 days Non-irritating 24/07/1964

Skin Contact: A 100% suspension of this material was tested:
Rabbit Draize 72 hours Non-irritating 27/03/1967

Ingestion: A 100% suspension of this material was tested:
Human Schwartz 14 days Non-sensitizing 06/04/1959
Acute Toxicity:
A 100% suspension of this material was tested:
LD50 rat > 38.9 g/kg 14 days Relatively harmless 17/03/1966

Chronic: Chronic ingestion studies in animals have shown that repeated doses produce no significant effects.

Studies in animals have shown that repeated doses produce no carcinogenic effects.

Reproductive Toxicity/Teratogenicity: A study in animals has shown that high doses produce no teratogenic effects.

12. ECOLOGICAL INFORMATION

Environmental Fate & Distribution This product is soluble in water
Persistence & Degradability: (OECD static test method) (19 days) 100%
Toxicity: LC50 (96 hour) (static) rainbow trout 216 mg/l
IC0 Pseudomonas putida > 10000 mg/l
LC50 (21 days) Daphnia magna 10 mg/l
LC50 (96 hour) (semi static) Daphnia magna > 100 mg/l
The product is anticipated to be substantially removed in biological treatment processes.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Do not put into sewer lines. Dispose of according to local, state and federal regulations.
Empty container retains product residue. Observe all hazard precautions. Do not distribute, make available, furnish or reuse empty containers, except for storage and shipment of original product. Remove all product residue from container and puncture or otherwise destroy empty container.

14. TRANSPORT INFORMATION

DOT Classification: Not regulated
TDG: Not regulated
Not classified in RID/ADR-ADNR-IMDG-ICAO/IATA-DGR.

15. REGULATORY INFORMATION

Inventory Status: EU Compliant
USA Compliant
Canada Compliant
Australia Compliant
Japan Compliant
China Compliant
Korea Compliant
Philippines Compliant

OSHA Hazard Communication Standard : 29 CFR 1910.1200, Hazard Summary:
Health Hazards : None
Physical Hazards : None

WHMIS Classification : Non-controlled (nonhazardous)

SARA 313 : No 313-listed chemicals in this product

SARA 311/312 Hazard Categories: Immediate: N
Delayed: N
Fire: N
Pressure: N
Reactivity: N

State Regulations:

California Proposition 65: WARNING. This product contains the following chemical(s) known to the State of California to cause cancer. Values listed are percent weight, ie 0.0001 = 1 ppm.

Formaldehyde (gas)	0.0025	No Significant Risk Level:	40 µg/day
1,4-Dioxane	0.001	No Significant Risk Level:	30 µg/day
Acetaldehyde	0.0006	No Significant Risk Level:	90 µg/day (inhalation)
Ethylene oxide	0.000000	No Significant Risk Level:	2 µg/day

No Significant Risk Level (NSRLs) as per the Title 22, California code of Regulations, section 12705 and

12805

California Proposition 65: WARNING. This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm. Values listed are percent weight, ie 0.0001 = 1 ppm.

Ethylene oxide 0.000000 Maximum Allowable Dose Level: 20 µg/day

Maximum Allowable Dose Levels (MADLs) as per the Title 22, California code of Regulations, section 12705 and 12805

16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

This product is not considered hazardous. The customer is most aware of the application of this product and therefore he must ensure that the proper personal protective equipment is provided consistent with information in the product MSDS.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.