

### Section 1: Identification

<b>Common Name/Trade Name</b>	POLYSORBATE 20	
<b>Supplier Information</b>	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	<b>IN CASE OF EMERGENCY:</b> Chemtrec 1 (800) 424-9300 (24 hours)
<b>Product Synonym(s)</b>	Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs.; Polyoxyethylene sorbitan monolaurate; POLYSORBATE 20 (INCI Name).	
<b>Relevant Use(s) of Product</b>	Manufacture or Compounding of Substances	

### Section 2: Hazards Identification

<b>Classification of Substance or Mixture</b>	Not classified
<b>Signal Word</b>	None
<b>Hazard Statement(s)</b>	N/A
<b>Pictogram(s)</b>	N/A
<b>Precautionary Statement(s)</b>	N/A
<b>Hazards Not Otherwise Classified</b>	No data available
<b>Ingredient(s) with Unknown Toxicity</b>	No data available

### Section 3: Composition/Information on Ingredients

<b>Chemical Name</b>	POE (20) SORBITAN MONOLAURATE USP /NF FCC
<b>Common Name</b>	Polysorbate 20
<b>CAS Number</b>	9005-64-5
<b>Impurities and/or Stabilizing Additives</b>	No data available

### Section 4: First Aid Measures

<b>General Advice</b>	Information for doctor There is not known any specific antidote. Direct the treatment in accordance with the symptoms and clinical conditions of the patient.
<b>If Inhaled</b>	Seek prompt medical attention. Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.
<b>In Case of Skin Contact</b>	Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower. Seek prompt medical attention.
<b>In Case of Eye Contact</b>	Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open. Remove contact lenses if easy to do. Seek prompt medical attention.
<b>If Swallowed</b>	Seek prompt medical attention. Do not induce vomiting. Vomiting should only be induced by medical personnel. If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person.
<b>Most Important Symptoms and Effects</b>	Ingestion - High levels caused diarrhea and other effects secondary to laxation. May cause intestinal obstruction. Inhalation - Due to the low vapor pressure, no significant health hazard from inhalation is likely to occur at normal room temperatures. Mist or vapors produced from elevated temperatures may cause irritation of the mucous membranes and in high levels may cause a chemical pneumonitis. Skin - Prolonged or repeated exposure may cause irritation of the skin by removing natural oils, causing redness and papular dermatitis. Eyes - May cause minimal to moderate conjunctival irritation.

### Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	Water spray. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder.
<b>Special Hazards Arising From the Substance/Mixture</b>	Product is not flammable. In case of combustion it may generate carbon monoxide, besides CO2.
<b>Special PPE and/or Precautions for Firefighters</b>	Water jets should not be used directly on igniting products because it may disperse the material and intensify the fire. Self-contained breathing apparatus and protective clothing are required. Cool the intact fire-exposed containers with water spray and remove them.

## Section 6: Accidental Release Measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Isolate and signalize area. Keep heat and/or ignition sources away. Use personal protection equipment as indicated in Section 8, in order to avoid contact with spilled product.
<b>Methods and Materials Used for Containment</b>	Prevent product from entering into soil and waterways. Notify the competent authorities if the product has run into drainage systems or watercourse or has contaminated the ground or vegetation.
<b>Cleanup Procedures</b>	Stop if possible. Contain and dike spilled product with earth or sand. Eliminate ignition or heat sources. Transfer to proper container. Collect remnants with an appropriate absorbent material. Wash the contaminated surface with water, which should be collected for disposal.

## Section 7: Handling and Storage

<b>Precautions for Safe Handling</b>	Use in a well-ventilated area. Avoid inhalation and contact with eyes, skin or clothing through proper protection. If occurs accidental contact, exposed area should be washed immediately. Emergency eyewashes and showers shall be located in accessible locations. Wash hands and face thoroughly after handling. Wash contaminated clothing before reuse.
<b>Conditions for Safe Storage</b>	Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames. Ensure that the storage location has adequate moisture, pressure and temperature. Keep containers tightly closed when not in use. The product can be stored, in liquid state, at temperatures slightly between 20 and 50 °C, which, as recommended, is maintained at inert gas atmosphere. Incompatibilities Avoid contact with: Strong oxidizing agents.

## Section 8: Exposure Controls/Personal Protection

<b>Components with Workplace Control Parameters</b>	TLV-TWA (ACGIH) 1,4-Dioxane: 20 ppm; 72 mg/m <sup>3</sup> [Skin][A3]. Ethylene oxide: 1 ppm; 1.8 mg/m <sup>3</sup> [A2]. Skin - Danger of cutaneous absorption. A2 - Suspected Human Carcinogen A3 - Confirmed animal carcinogen with unknown relevance to humans. PEL-TWA (OSHA) 1,4-Dioxane: 100 ppm; 360 mg/m <sup>3</sup> [Skin]. Ethylene oxide: 1 ppm. Skin - Danger of cutaneous absorption. TLV-STEL (ACGIH) Not established. LT (NR15) Ethylene oxide: 39 ppm; 70 mg/m <sup>3</sup> . Odor Threshold Not available. IDLH 1,4-Dioxane: 500 ppm. Ethylene oxide: 800 ppm. Biological Exposure Indices (ACGIH) Not established.
<b>Appropriate Engineering Controls</b>	In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).
<b>PPE - Eye/Face Protection</b>	Side shields or wide vision safety goggles.
<b>PPE - Skin Protection</b>	PVC apron. It is recommended to adopt safety boots/shoes.
<b>PPE - Body Protection</b>	Gloves made of: Rubber. PVC (Polyvinyl chloride).
<b>PPE - Respiratory Protection</b>	In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self contained breathing apparatus. It is recommended to wear face mask with organic vapors cartridge in case of exposure to vapors/aerosols.

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Liquid. Clear. Yellowish.
<b>Upper/Lower Flammability or Explosive Limits</b>	Not available.
<b>Odor</b>	Odorless.
<b>Vapor Pressure</b>	Not available.
<b>Odor Threshold</b>	Odorless.
<b>Vapor Density</b>	Not available.
<b>pH</b>	5.5 - 6.5 (5% w/w, 25 °C).
<b>Relative Density</b>	(water=1) 1.098 g/cm <sup>3</sup> (25 °C).
<b>Melting Point/Freezing Point</b>	Not available.
<b>Solubility</b>	Soluble in water (20 °C for 1 hour / 0.5% concentration).
<b>Initial Boiling Point and Boiling Range</b>	Not available.
<b>Flash Point</b>	> 149 °C (open glass).
<b>Evaporation Rate</b>	Not available.
<b>Flammability (Solid, Gas)</b>	Not applicable.
<b>Partition Coefficient</b>	Not available.
<b>Auto-Ignition Temperature</b>	Not available.
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	ca. 400 mPa.s (25 °C).

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No hazardous reactivity is expected.
<b>Chemical Stability</b>	Stable under normal conditions of use and storage.
<b>Possibility of Hazardous Reactions</b>	Not polymerize.
<b>Conditions to Avoid</b>	High temperatures, ignition sources and prolonged exposure to the air.
<b>Incompatible Materials</b>	Avoid contact with: Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	In case of combustion it may generate carbon monoxide, besides CO <sub>2</sub> . Considerations on the use of the product: The product can form a gel at temperatures < 20 °C.

## Section 11: Toxicological Information

<b>Acute Toxicity - LD50 Oral</b>	LD50, rat: 37000 mg/kg.
<b>Acute Toxicity - Inhalation</b>	Not available.
<b>Acute Toxicity - Dermal</b>	Not available.
<b>Acute Toxicity - Eye</b>	Draize eye irritation score was an 5.3 out of a possible 110.
<b>Skin Corrosion/Irritation</b>	Mild irritation (patch test, rabbit).
<b>Serious Eye Damage/Irritation</b>	Draize eye irritation score was an 5.3 out of a possible 110.
<b>Respiratory or Skin Sensitization</b>	Not sensitizing to the human skin.
<b>Germ Cell Mutagenicity</b>	Not available
<b>Carcinogenicity IARC</b>	None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.
<b>Carcinogenicity ACGIH</b>	None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.
<b>Carcinogenicity NTP</b>	None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.
<b>Carcinogenicity OSHA</b>	None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.
<b>Reproductive Toxicity</b>	The maternal LOAEL in rats was 5000 mg/kg/day (based upon a 14% decrease in weight gain) and the maternal NOAEL was 500 mg/kg/day. The developmental NOAEL was greater than 5000 mg/kg/day.
<b>Specific Target Organ Toxicity - Single Exposure</b>	Not available.
<b>Specific Target Organ Toxicity - Repeated Exposure</b>	Not available.
<b>Aspiration Hazard</b>	Not expected to be an aspiration hazard.

## Section 12: Ecological Information

<b>Toxicity</b>	The aquatic toxicity is not known. Based on similar products, it is not considered toxic to aquatic life.
<b>Persistence and Degradability</b>	Expected to be biodegradable.
<b>Bio-accumulative Potential</b>	It is not expected to bioaccumulate in the environment.
<b>Mobility in Soil</b>	Not available.
<b>Other Adverse Effects</b>	Water hazard class 1: Slightly hazardous to water.

## Section 13: Disposal Considerations

<b>Waste Treatment Methods Product</b>	The preferred options for disposal include reuse, recycling, co-processing, finding a use for a byproduct, incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions. The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.
<b>Waste Treatment Methods Packaging</b>	Product Remains: Same method as indicated for product. Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies
<b>Special Precautions Landfill or Incinerations</b>	No data available
<b>Other Information</b>	No data available

## Section 14: Transport Information

<b>UN Number</b>	Not dangerous goods.
<b>UN Proper Shipping Name</b>	N/A
<b>Transport Hazard Class(es)</b>	N/A
<b>Packaging Group</b>	N/A
<b>Environmental Hazards</b>	N/A

## Section 15: Regulatory Information

Applicable standards Resolution 420 / 2004 of Transport Ministry. Dangerous Goods by Road (ADR) Available from January 1st, 2011 UNECE (United Nations Economic Commission for Europe). U.S.A Department of Transportation DOT 49 CFR 172.101. Dangerous Goods Regulations - 55th Edition - IATA (International Air Transport Association). IMDG Code - 2012 Edition - IMO (International Maritime Organization). OSHA Hazard Communication Standard This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. SARA Title III - Sections 311 / 312 (40 CFR 370 Subparts B and C) Immediate (Acute) Health Hazard: No. Delayed (Chronic) Health Hazard: No. Fire Hazard: No. Sudden Release of Pressure Hazard: No. Reactive Hazard: No. SARA Title III - Section 313 (40 CFR 372.65) This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations. # SARA Title III - Section 302 (40 CFR 355 Appendix A) Ethylene oxide (CAS 75-21-8): max. 1 ppm. TPQ: 1000 lbs. # CERCLA (40 CFR 302.4) / SARA 304 1,4-Dioxane (CAS 123-91-1): max. 10 ppm. RQ: 100 lbs. Ethylene oxide (CAS 75-21-8): max. 1 ppm. RQ 10 lbs. Reportable Quantity (RQ) of this product is 10000000 pounds based upon 1,4-Dioxane / Ethylene oxide which yielded the lowest resultant RQ according to the following formula: CERCLA ingredient RQ/ % of that ingredient in the product. New Jersey Hazardous Substance List 1,4-Dioxane: Substance# 0789 (Special Health Hazard Code: CA Carcinogen; F3 Flammable 3rd degree). Ethylene oxide: Substance# 0882 (Special Health Hazard Code: CA Carcinogen; MU Mutagen; TE Teratogen; F4 Flammable 4th degree; R3 Reactive 3rd degree). California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act) WARNING! This product contains a chemical known to the State of California to cause cancer. - 1,4-Dioxane. - Ethylene oxide. WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. - Ethylene oxide. Pennsylvania Hazardous Substance List 1,4-Dioxane (CAS 123-91-1) and Ethylene oxide (CAS 75-21-8): Listed also as an environmental hazard and as a special hazardous substance. Inventory Status United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory: Yes Canada Domestic Substances List (DSL): Yes Canada Non-Domestic Substances List (NDSL): No Europe European Inventory of Existing Commercial Chemical Substances (EINECS): No Europe European List of Notified Chemical Substances (ELINCS): No Australia Australian Inventory of Chemical Substances (AICS): Yes Philippines Philippine Inventory of Chemicals and Chemical Substances (PICCS): Yes Japan Inventory of Existing and New Chemical Substances (ENCS): Yes Korea Existing Chemicals List (ECL): Yes China Inventory of Existing Chemical Substances in China (IECSC): Yes New Zealand New Zealand Inventory: Yes \*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

## Section 16: Other Information

<b>Additional Information</b>	N/A
<b>Prepared By</b>	Lisa Russell
<b>Revision Date</b>	01/10/2019 11:51

### Disclaimer

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