

### 1. IDENTIFICATION

#### Product identifier

**Product code:** PO138  
**Product Name:** POLYSORBATE 80

#### Other means of identification

**Synonyms:** TWEEN 80  
Polyoxyethylene 20 sorbitan monooleate  
Polyethylene oxide sorbitan mono-oleate  
Polyoxyethylene sorbitan monooleate  
Polyoxyethylene sorbitan oleate

**CAS #:** 9005-65-6  
**RTECS #** WG2932500  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** Emulsifying agent.  
**Uses advised against** No information available

#### Supplier

**Swadesh Life Science**  
H-103, Sumel 7, Near Soni ni chali  
BRTS, Rakhiyal,  
Ahmedabad, Gujarat, India

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is not considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)  
Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

#### Label elements

**Not classified**

#### Hazards not otherwise classified (HNOC)

Not Applicable

#### Other hazards

Not available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Polysorbate 80	9005-65-6	100

### 4. FIRST AID MEASURES

#### First aid measures

##### **General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

##### **Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.

##### **Eye Contact:**

Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

##### **Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

##### **Ingestion:**

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

#### Most important symptoms and effects, both acute and delayed

##### **Symptoms**

May cause eye/skin irritation

#### Indication of any immediate medical attention and special treatment needed

##### **Notes to Physician:**

Treat symptomatically.

#### Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

##### **Suitable Extinguishing Media:**

Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray mist or foam.

##### **Unsuitable Extinguishing Media:**

No information available.

#### Specific hazards arising from the chemical

##### **Hazardous Combustion Products:**

Carbon Monoxide, Carbon Dioxide.

##### **Specific hazards:**

May be combustible at high temperatures. May be ignited by heat, sparks or flames.

#### Special Protective Actions for Firefighters

##### **Specific Methods:**

No information available.

**Special Protective Equipment for Firefighters:**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:** Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

**Methods for cleaning up** Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

### 7. HANDLING AND STORAGE

**Precautions for safe handling****Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

**Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe vapors or spray mist. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities****Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

**Incompatible Materials:**

Strong oxidizing agents

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Appropriate engineering controls****Engineering measures to reduce exposure:**

Ensure adequate ventilation. Provide exhaust ventilation or

other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

<b>Eye protection:</b>	Goggles or Safety glasses with side-shields
<b>Skin and body protection:</b>	Long sleeved clothing Chemical resistant apron Gloves
<b>Respiratory protection:</b>	Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Appearance:</b> Oily.	<b>Color:</b> Light yellow. Yellow. Amber.
<b>Odor:</b> No information available.	<b>Taste</b> No information available.	<b>Formula:</b> No information available
<b>Molecular/Formula weight:</b> No information available	<b>Flammability:</b> No information available	<b>Flash point (°C):</b> >149
<b>Flashpoint (°C/°F):</b> >149 °C/>300 °F	<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available
<b>Lower Explosion Limit (%):</b> No information available	<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> - 20.56 °C/-5 °F
<b>Decomposition temperature(°C/°F):</b> No information available	<b>Boiling point/range(°C/°F):</b> >100 °C/>212 °F	<b>Bulk density:</b> No information available
<b>Density (g/cm<sup>3</sup>):</b> No information available	<b>Specific gravity:</b> 1.06-1.10	<b>pH:</b> No information available
<b>Vapor pressure @ 20°C (kPa):</b> No information available	<b>Evaporation rate:</b> No information available	<b>Vapor density:</b> No information available
<b>VOC content (g/L):</b> No information available	<b>Odor threshold (ppm):</b> No information available	<b>Partition coefficient (n-octanol/water):</b> No information available
<b>Viscosity:</b> No information availabl	<b>Miscibility:</b> No information available	<b>Solubility:</b> Freely soluble in water Soluble in Methanol

### 10. STABILITY AND REACTIVITY

<b>Conditions to avoid:</b>	Heat. Ignition sources. Incompatible materials.
<b>Incompatible Materials:</b>	Strong oxidizing agents
<b>Hazardous decomposition products:</b>	Carbon oxides. When heated to decomposition it emits acrid smoke and irritating fumes.
<b>Other Information</b>	
<b>Corrosivity:</b>	No information available
<b>Possibility of Hazardous Reactions:</b>	Hazardous polymerization does not occur
<b>Special Remarks on Corrosivity:</b>	No information available

### 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

#### Principal Routes of Exposure:

Skin. Ingestion. Eyes.

#### Acute Toxicity

#### Component Information

Polysorbate 80	
CAS-No.	9005-65-6

**LD50/oral/rat** = 34500 µL/kg Oral LD50 Rat; >38000 mg/kg

**LD50/oral/mouse** = 25000 mg/kg

**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = No information available

**LC50/inhalation/rat** = No information available

**LC50/inhalation/mouse** = No information available

**Other LD50 or LC50 information** = No information available

#### Product Information

**LD50/oral/rat** =

**VALUE- Acute Tox Oral** = > 38000 mg/kg

**LD50/oral/mouse** =

**Value - Acute Tox Oral** = 25000 mg/kg

**LD50/dermal/rabbit**

**VALUE-Acute Tox Dermal** = No information available

**LD50/dermal/rat**

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## MATERIAL SAFETY DATA SHEET

VALUE -Acute Tox Dermal = No information available

### LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

### LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

### Symptoms

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Inhalation** May cause irritation of respiratory tract. However, no irritation is expected to be associated with the inhalation of this material. No toxic effects are known to be associated with the inhalation of this material.

**Ingestion** Health injuries are not known or expected under normal use. Not expected to be a health hazard. This material is not likely to cause irritation upon ingestion. It is classified as "relatively harmless" by ingestion and considered to be a low ingestion hazard. Ingestion of very large doses may cause abdominal spasms and diarrhea. Animal studies have shown it to cause cardiac changes, changes in behavior (altered sleep time) upon IV administration. However, no similar human data has been reported.

**Aspiration hazard** No information available.

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

**Chronic Toxicity** La ingestión prolongada o repetida puede causar hipermotilidad y diarrea. Prolonged or repeated ingestion may cause weight loss.

**Sensitization:** No information available.

**Mutagenic Effects:** May affect genetic material

**Carcinogenic effects:** Not considered carcinogenic. Equivocal tumorigenic agent by Registry of Toxic Effects of Chemical Substances (RTECS) criteria.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Polysorbate 80	9005-65-6	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity** No data is available

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## MATERIAL SAFETY DATA SHEET

**Reproductive Effects:** No information available  
**Developmental Effects:** No information available  
**Teratogenic Effects:** No information available

### Specific Target Organ Toxicity

**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organs:** No information available.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

**Ecotoxicity effects:** No data available.  
**Persistence and degradability:** No information available  
**Bioaccumulative potential:** No information available.  
**Mobility:** No information available.

## 13. DISPOSAL CONSIDERATIONS

### Disposal Methods

**Waste from residues / unused products:**  
Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**  
Empty containers should be taken for local recycling, recovery or waste disposal

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Polysorbate 80	9005-65-6	None	None	None	None