

## Material Safety Data Sheet

Date Printed: 07/JUN/2005

Date Updated: 16/MAR/2004

Version 1.1

According to 91/155/EEC

---

1 - Product and Company Information

---

Product Name	POLYOXYETHYLENESORBITAN MONOSTEARATE TWEEN 60
Product Number	P1629
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone #	+61 2 9841 0555 (1800 800 097)
Fax	+61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

---

2 - Composition/Information on Ingredients

---

Product Name	CAS #	EC no	Annex I Index Number
POLYOXYETHYLENESORBITAN MONOSTEARATE(TWEEN 61)	9005-67-8	None	None
Formula	C64H126O26		
Molecular Weight	1,311.7 AMU		
Synonyms	Glycosperse S-20 * Polyoxyethylene sorbitan monostearate * Polyoxyethylene 20 sorbitan monostearate * Polyoxyethylene-40-sorbitan monostearate * Polysorbate 60 * Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivs. * Tween 60		

---

3 - Hazards Identification

---

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Not hazardous according to Directive 67/548/EEC.

---

4 - First Aid Measures

---

## AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give  
artificial respiration. If breathing is difficult, give oxygen.

## AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious  
amounts of water.

## AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts  
of water for at least 15 minutes.

## AFTER INGESTION

If swallowed, wash out mouth with water provided person is

conscious. Call a physician.

---

## 5 - Fire Fighting Measures

---

### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

---

## 6 - Accidental Release Measures

---

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

---

## 7 - Handling and Storage

---

### HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

### STORAGE

Conditions of Storage: Keep tightly closed. Store in a cool dry place.

---

## 8 - Exposure Controls / Personal Protection

---

### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

---

## 9 - Physical and Chemical Properties

---

Appearance	Color: Deep yellow Form: Faintly turbidviscous liquid	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	100 °C	
MP/MP Range	21.1 °C	
Flash Point	150 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	

Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	< 1 mmHg	20 °C
SG/Density	1.044 g/cm3	
Partition Coefficient	N/A	
Viscosity	75 - 175 Pas	50°C
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solubility in Water:Soluble.	

## 10 - Stability and Reactivity

### STABILITY

Materials to Avoid: Strong oxidizing agents, Bases, Heavy metal salts.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

## 11 - Toxicological Information

RTECS NUMBER: WG2934000

### ACUTE TOXICITY

LD50  
Oral  
Rat  
>60 ML/KG

LD50  
Intravenous  
Rat  
1220 MG/KG

### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Eye Contact: May cause eye irritation.  
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption.

### CHRONIC EXPOSURE - CARCINOGEN

Rat  
Route of Application: Subcutaneous  
Exposure Time: 7W  
Result: Tumorigenic:Equivocal tumorigenic agent by RTECS

criteria. Tumorigenic:Tumors at site or application.

Mouse

Route of Application: Skin

Exposure Time: 35W

Result: Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors. Tumorigenic:Tumors at site or application.

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat

Dose: 635 GM/KG

Route of Application: Oral

Exposure Time: (MULTIGENERATIONS)

Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat

Dose: 1270 GM/KG

Route of Application: Oral

Exposure Time: (84D PRE-21D POST)

Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive).

Species: Mouse

Dose: 41600 MG/KG

Route of Application: Oral

Exposure Time: (7-14D PREG)

Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Species: Mouse

Dose: 41600 MG/KG

Route of Application: Oral

Exposure Time: (6-13D PREG)

Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain).

---

#### 12 - Ecological Information

No data available.

---

#### 13 - Disposal Considerations

---

##### SUBSTANCE DISPOSAL

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

---

#### 14 - Transport Information

---

##### RID/ADR

Non-hazardous for road transport.

##### IMDG

Non-hazardous for sea transport.

##### IATA

Non-hazardous for air transport.

---

## 15 - Regulatory Information

---

Not hazardous according to Directive 67/548/EEC.

### COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

SWITZERLAND

SWISS POISON CLASS: FREI

---

## 16 - Other Information

---

### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

### DISCLAIMER

For R&D use only. Not for drug, household or other uses.