

# MATERIAL SAFETY DATA SHEET

ANATRACE, INC.  
434 WEST DUSSEL DRIVE  
MAUMEE, OHIO 43537  
TEL: 419-891-3030  
FAX: 419-891-3037

Chemical Emergency (24-hr):  
- Within U.S. & Canada (800-424-9300)  
- International (703-527-3887)

Effective Date: 02./01/2006 Revised:

**NAME: TWEEN® 60**  
(Polyoxyethylene sorbitan monooleate)

**CAT. NO: T1006**

**MF: N/A / FW: N/A**

**CAS NO: 9005-67-8**

**CHIP R & S Phrases:** No applicable information

**HAZARDS IDENTIFICATION: CHIP / HCS:** No applicable information

**FIRST-AID MEASURES EYES:** Flush with water for 15 minutes. Seek medical advice if irritation persists.

**SKIN:** Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.

**INHALATION:** Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.

**INGESTION:** Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

**FIRE-FIGHTING INFORMATION** Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. Emits toxic fumes under fire conditions.

Flash Point = 302°F (150°C) (Closed Cup).

**ACCIDENTAL RELEASE MEASURES** Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved (or equivalent) respirator and appropriate to the hazard. Contain the spill with an inert absorbent and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

**HANDLING AND STORAGE** Wear suitable protective clothing including lab coat, chemical resistant safety glasses, gloves and NIOSH-approved (or equivalent) respirator and gloves. A qualified industrial hygienist should evaluate the need for respiratory protection. Store ambient away from incompatible material. Use adequate ventilation.

**PERSONAL PROTECTION** Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Access to a safety shower and eye-wash.

## **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance: Yellow to amber liquid Boiling Point: No data available

Vapor Pressure: <1.0 mmHg @ 20°C Vapor Density: No data available

Solubility (Water): Soluble Specific Gravity: 1.044 g/cm<sup>3</sup>

Percent Volatile: No data available Evaporation Rate: No data available

Chemical Formula: C<sub>64</sub>-H<sub>126</sub>-O<sub>26</sub> CAS Number: 9005-67-8

**STABILITY AND REACTIVITY** Product is stable. Hazardous decomposition products include oxides of carbon. Incompatible with strong oxidizing agents, bases and heavy metal salts. Hazardous polymerization will not occur.

## **TOXICOLOGICAL INFORMATION EFFECTS OF OVEREXPOSURE:**

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

**EYES:** Contact may cause mild eye irritation.

**SKIN:** Contact may cause irritation. This product will probably not be absorbed through the skin.

**INHALATION:** May cause irritation to mucous membranes and upper respiratory tract. No toxic effects are known to be associated with inhalation of vapors from this material.

**INGESTION:** Chronic ingestion or excessive dosage may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Relative to other materials, this product is classified as relatively harmless by ingestion.

## **ADDITIONAL INFORMATION:**

May cause adverse reproductive effects based upon animal evidence. Reproductive effects, tumorigenic data and toxicity data listed in RTECS under WG2934000. Please see RTECS for the complete text. Toxicity Data: Oral Rat LD<sub>50</sub> = >60 mL/Kg (1956). Details of toxic effects not reported other than lethal dose value. Tumorigenic Data: TDLo Subcutaneous rat; dose = 2100 mg/Kg - equivocal tumorigenic agent by RTECS criteria. Tumors at site of application (1962).

Reproductive: Effects on Newborn - specific abnormalities include viability (1956) and growth statistics such as reduced weight gain (1987). Definition(s): RTECS = Registry of Toxic Effects of Chemical Substances.

**ECOLOGICAL INFORMATION** No information available.

**DISPOSAL CONSIDERATIONS** Dispose of material in accordance with applicable local, state, and federal regulations.

**TRANSPORTATION INFORMATION** US DOT / IATA: No applicable information.

**REGULATORY INFORMATION** RCRA - No applicable information.

SARA 302 - This material does not have an RQ or TPQ.

SARA 313 - This material is not reportable under 313.

EPA TSCA Section 8(b) - Chemical Inventory.

8(d) - unpublished health/safety studies.

Exposure Limits - Not established.

California Proposition 65 - No applicable information.

This bulletin is for your guidance and is based upon information and tests believed to be reliable. Anatrace makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages thereto. The date is offered solely for your consideration, investigation, and verification. These suggestions should not be confused with either state, municipal, or insurance requirements, or with national safety codes, and constitute no warranty. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State and local regulations.