

SUSTERRA® PROPANEDIOL

Version 2.1

Revision Date 09/23/2010

Ref. 130000033547

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : SUSTERRA® PROPANEDIOL
MSDS Number : 130000033547

Manufacturer : DuPont Tate & Lyle Bio Products Company
198 Blair Bend Drive
Loudon TN 37774
United States of America

Product Information : +1-866-404.7933
Medical Emergency : 1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency : CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Propane-1,3-diol	504-63-2	>99.7%

SECTION 4. FIRST AID MEASURES

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Skin contact	: No hazards which require special first aid measures.
Eye contact	: Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Inhalation	: No hazards which require special first aid measures.
Ingestion	: No hazards which require special first aid measures.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable Properties

Flash point : 129 °C (264 °F)
Method : Cleveland open cup - COC

Fire and Explosion Hazard : Exposure to decomposition products may be a hazard to health.

Suitable extinguishing media : Water, Foam, Dry chemical, Carbon dioxide (CO₂)

Firefighting Instructions : Wear self-contained breathing apparatus and protective suit.
Evacuate personnel to safe areas. Evacuate personnel and keep upwind of fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Spill Cleanup : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Accidental Release Measures : Do not flush into surface water or sanitary sewer system.

SECTION 7. HANDLING AND STORAGE

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- Handling (Personnel) : No special precautions are needed in handling this material.
- Storage : Store in a cool, dry place. Keep container closed to prevent contamination. Store bulk quantities under nitrogen blanket Keep away from heat, sparks and flames.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment
Respiratory protection : A respiratory protection program that meets country requirements must be followed whenever workplace conditions warrant respirator use. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer. Consult the OSHA respiratory protection information located at 29CFR 1910.134.
- Eye protection : Wear safety glasses with side shields.
- Skin and body protection : Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket.
- Exposure Guidelines
Exposure Limit Values
None established.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid
- Color : clear
- Odor : Slight odour
- Melting point : -24.6 °C (-12.3 °F)
- Boiling point : 214 °C (417 °F)
- Vapour Pressure : 0.1067 hPa at 20 °C (68 °F)
: 0.58 hPa at 25 °C (77 °F)
: 13.0656 hPa at 100 °C (212 °F)
- Specific Gravity : 1.053
- Water solubility : > 1,000 g/l
- Viscosity : 52 mPa.s at 20 °C (68 °F)

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SECTION 10. STABILITY AND REACTIVITY

Stability	: Stable at normal temperatures and storage conditions.
Conditions to avoid	: Temperature > 129 °C (> 264 °F)
Incompatibility	: Strong acids and oxidizing agents
Hazardous decomposition products	: No decomposition if stored normally.
Hazardous reactions	: Hazardous polymerization will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Propane-1,3-diol	
Dermal LD50	: > 4,200 mg/kg , rat
Oral LD50	: 15,800 mg/kg , rat
Inhalation 4 h ALC	: > 5.0 mg/l , rat
Skin irritation	: slight irritation, rabbit Negative in human patch test., human
Eye irritation	: slight irritation, rabbit
Skin sensitization	: Patch test on human volunteers did not demonstrate sensitization properties., human Did not cause sensitization on laboratory animals., guinea pig
Repeated dose toxicity	: Inhalation rat No toxicologically significant effects were found.

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Carcinogenicity	:	Overall weight of evidence indicates that the substance is not carcinogenic.
Mutagenicity	:	Did not cause genetic damage in animals. Did not cause genetic damage in cultured mammalian cells. Did not cause genetic damage in cultured bacterial cells.
Reproductive toxicity	:	Evidence suggests the substance is not a reproductive toxin in animals. Information given is based on data obtained from similar substances.
Teratogenicity	:	Animal testing showed no developmental toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity

Propane-1,3-diol

96 h EC50	:	Pimephales promelas (fathead minnow) > 9,720 mg/l
72 h EbC50	:	Algae 1,600 mg/l
48 h EC50	:	Daphnia magna (Water flea) 7,417 mg/l

Environmental Fate

Propane-1,3-diol

Biodegradability	:	Readily biodegradable.
Bioaccumulation	:	Bioaccumulation is unlikely.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal	:	Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.
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SECTION 14. TRANSPORT INFORMATION

Not regulated in transportation by DOT/IMO/IATA.

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

- TSCA Status : In compliance with TSCA Inventory requirements for commercial purposes.
- SARA 313 Regulated Chemical(s) : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- California Prop. 65 : Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known
- PA Right to Know Regulated Chemical(s) : Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): None known.
- NJ Right to Know Regulated Chemical(s) : Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): None known.

SECTION 16. OTHER INFORMATION

- Restrictions for use : Do not use DuPont Tate & Lyle Bio Products materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont Tate & Lyle Bio Products under a written contract that is consistent with DuPont Tate & Lyle Bio Products policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont Tate & Lyle Bio Products representative. You may also request a copy of the DuPont Tate & Lyle

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Bio Products POLICY Regarding Medical Applications and DuPont Tate & Lyle Bio Products CAUTION Regarding Medical Applications.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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