



MSDS: 0020841
Print Date: 04/14/2009
Revision Date: 02/26/2009

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SANTOSOL® DME 1 additives
Synonyms: None
Chemical Family: Refined dimethyl esters of mixed dibasic acids
Molecular Formula: Mixture
Molecular Weight: Mixture

CYTEC INDUSTRIES INC., FIVE GARRET MOUNTAIN PLAZA, WOODLAND PARK, NEW JERSEY 07424, USA
For Product Information call 1-800/652-6013. Outside the USA and Canada call 1-973/357-3193.

EMERGENCY PHONE (24 hours/day) - For emergency involving spill, leak, fire, exposure or accident call:

Asia Pacific Region:

Australia - +61-3-9663-2130 or 1800-033-111
China (PRC) - +86(0)532-8388-9090 (NRCC)
New Guinea - +61-3-9663-2130
New Zealand - +61-3-9663-2130 or 0800-734-607
All Others - +65-633-44-177 (CareChem24 Singapore)

Canada: 1-905-356-8310 (Cytec Welland, Canada plant)

Europe/Africa/Middle East: +44-(0)208-762-8322 (CareChem24 UK)

Latin America:

Brazil - 0800 0111 767 (SOS Cotec)
Chile - +56-2-247-3600 (CITUC QUIMICO)
All Others - +52-376-73 74122 (Cytec Atequiza, Mexico plant)

USA: +1-703-527-3887 or 1-800-424-9300 (CHEMTREC)

® indicates trademark registered in the U.S. Outside the U.S., mark may be registered, pending or a trademark. Mark is or may be used under license.

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA REGULATED COMPONENTS

Component / CAS No.	% (w/w)	OSHA (PEL):	ACGIH (TLV):	Carcinogen
dimethyl succinate 106-65-0	17 - 25	Not established	Not established	-
dimethyl adipate 627-93-0	10 - 14	Not established	Not established	-

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR:

Color: colorless
Appearance: liquid
Odor: sweet

STATEMENTS OF HAZARD:

WARNING! CAUSES EYE IRRITATION
MAY CAUSE SKIN IRRITATION
MAY CAUSE RESPIRATORY TRACT IRRITATION
MAY CAUSE BLURRED VISION

POTENTIAL HEALTH EFFECTS**EFFECTS OF EXPOSURE:**

The acute oral (rat) LD50, acute dermal (rabbit) LD50 and 4-hour inhalation (rat) LC50 values for this material are >2000 mg/kg, >5000 mg/kg and >10,7 mg/l, respectively. Based on similar material. This similar product produced mild skin and moderate eye irritation during primary irritation studies in rabbits. No dermal sensitization was produced in guinea pigs (based on similar product). Repeat dose toxicity: rat, gavage, 28 days: no adverse treatment related effects. Repeat dose toxicity: rat, inhalation, 90 day: produced effects on body weight, serum enzymes and/or organ weights in repeat dose studies. Repeated inhalation exposure produces nasal tissue damage. Minor changes in male fertility parameters, i.e. hormone measurements, sperm number or reproductive organ weights, observed in the absence of a change in reproductive performance. Rodents are more susceptible to reported effect than humans. Developmental toxicity: rat, inhalation: no effects on offspring observed in laboratory animals in the presence of maternal toxicity. Reproductive toxicity: rat, inhalation, 1 generation: signs of generalized toxicity (reduced body weight and/or reduced weight gain) were observed in parental animals and offspring with no effect on fertility or reproduction. Mutagenicity: no genetic effects were observed in standard tests using bacterial cells and whole animals. Genetic effects were observed in standard tests with animal cells. This material can produce temporary blurred vision following exposure to high vapour concentrations or direct contact with eyes. The effects reported are of limited duration and do not appear to cause permanent visual impediment. Refer to Section 11 for toxicology information on the regulated components of this product.

4. FIRST AID MEASURES**Ingestion:**

If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Skin Contact:

Wash immediately with plenty of water and soap.

Eye Contact:

Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Inhalation:

Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media:**

Use water spray or fog, carbon dioxide or dry chemical.

Extinguishing Media to Avoid:

high pressure water jet.

Protective Equipment:

Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See MSDS Section 8 (Exposure Controls/Personal Protection).

Special Hazards:

Keep containers cool by spraying with water if exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Where exposure level is not known, wear approved, positive pressure, self-contained respirator. Where exposure level is known, wear approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods For Cleaning Up:

Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

7. HANDLING AND STORAGE

HANDLING

Precautionary Measures: Avoid contact with eyes. Avoid breathing vapor. Use with adequate ventilation. Keep container closed. Wash thoroughly after handling.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values.

STORAGE

Store in a cool, dry, well ventilated place and keep container tightly closed. Observe the general rules of industrial fire protection.

Storage Temperature: Store at 0 - 25 °C 32 - 77 °F

Reason: Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:

Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:

For operations where inhalation exposure can occur, use an approved respirator recommended by an industrial hygienist after an evaluation of the operation. Where inhalation exposure can not occur, no respiratory protection is required. A full facepiece respirator also provides eye and face protection.

Eye Protection:

Wear eye/face protection such as chemical splash proof goggles or face shield. Eyewash equipment and safety shower should be provided in areas of potential exposure.

Skin Protection:

Avoid skin contact. Wear impermeable gloves and suitable protective clothing.

Additional Advice:

Santosol® DME-1 Cytec: 1.5 ml/m³ ; 10 mg/m³ ; 8-hr TWA
Cytec established exposure guideline.

Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: colorless

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	liquid
Odor:	sweet
Boiling Point:	195 - 216 °C 383 - 421 °F
Melting Point:	-40 °C
Vapor Pressure:	0.08hPa @ 20 °C
Specific Gravity/Density:	~1.06 g/cm ³
Vapor Density:	Not available
Percent Volatile (% by wt.):	Not available
pH:	Not available
Saturation In Air (% By Vol.):	Not available
Evaporation Rate:	Not available
Solubility In Water:	Not available
Volatile Organic Content:	Not available
Flash Point:	100 °C 212 °F Pensky-Martens Closed Cup
Flammable Limits (% By Vol.):	Not available
Autoignition Temperature:	Not available
Decomposition Temperature:	Not available
Partition coefficient (n-octanol/water):	Not available
Odor Threshold:	Not available

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions To Avoid:	None known
Polymerization:	Will not occur
Conditions To Avoid:	None known
Materials To Avoid:	Reactions with oxidising agents. Reactions with acids. Contact with alkalis.
Hazardous Decomposition Products:	Carbon monoxide (CO) Carbon dioxide smoke Aromatic and aliphatic hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under Section 3. HAZARDS IDENTIFICATION.
Toxicological information on the regulated components of this product is as follows:

Dimethyl succinate: Slightly toxic following oral administration. Practically nontoxic after skin application in animal studies. Moderately irritating to eyes (rabbit). Practically non irritating to skin (rabbit).

Dimethyl adipate: Practically nontoxic following oral administration. Practically nontoxic after skin application in animal studies. Practically non irritating to skin (rabbit). Moderately irritating to eyes (rabbit).

12. ECOLOGICAL INFORMATION

All ecological information provided was conducted on a structurally similar product.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Duration: 48 hr

Species: Daphnia sp. (Other)
136 mg/l EC50

DEGRADATION

Test: Modified SCAS (OECD 302A)

Procedure: Inherent
biodegradability

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA `listed hazardous waste` or has any of the four RCRA `hazardous waste characteristics.` Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA `listed hazardous waste`; information contained in Section 15 of this MSDS is not intended to indicate if the product is a `listed hazardous waste.` RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this MSDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 2 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Dangerous Goods? Not applicable/Not regulated

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

15. REGULATORY INFORMATION**Inventory Information**

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

This product contains a chemical substance that is subject to export notification under Section 12 (b) of the Toxic Substances Control Act, 15 U. S. C. 2601 et. seq. (This requirement applies to exports from the United States only.)

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

Australia: All components of this product are included in the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS) inventory or are not required to be listed on the Japanese inventory.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

OTHER ENVIRONMENTAL INFORMATION

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ(lbs)	S313	TSCA 12B
	59 - 73	None	0	No	Yes
dimethyl succinate 106-65-0	17 - 25	None		No	Yes
dimethyl adipate 627-93-0	10 - 14	None		No	Yes

PRODUCT HAZARD CLASSIFICATION UNDER SECTION 311 OF SARA

- Acute
-

16. OTHER INFORMATION**NFPA Hazard Rating (National Fire Protection Association)**

Health: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire: 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons For Issue:

Revised Section 3
Revised Section 8
Revised Section 15
Revised Section 16

This information is given without any warranty or representation. We do not assume any legal responsibility for same, nor do we give permission, inducement, or recommendation to practice any patented invention without a license. It is offered solely for your consideration, investigation, and verification. Before using any product, read its label.
