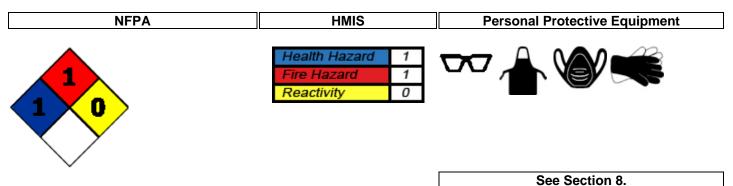




MATERIAL SAFETY DATA SHEET



1. CHEMICAL PRODUCT A	ND COMPANY IDENTIFICATION
Product code:	D2176
Product Name:	1,2-DECANEDIOL
Chemical Name:	No information available
Synonyms:	Decane-1,2-diol
Recommended use:	No information available.
CAS #:	1119-86-4
Formula:	С10-Н22-О2
RTECS #	Not available
CI#:	Not available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St.
	Gardena, CA 90248
	(310) 516-8000
Emergency Telephone Number:	CHEMTREC: 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Chris Terpak (East Coast)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW May cause skin and eye irritation. May cause irritation of respiratory tract.			
Odor: No information available	Physical state: Solid.	Appearance: Powder.	Color: White.
OSHA Pagulatory Status This material is not considered bazardous by the OSHA Hazard Communication			

OSHA Regulatory Status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 1910.1200)

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Potential Health Effects:

Skin Contact:

May cause skin irritation.

Eye Contact:

Contact with eyes may cause irritation.

Inhalation:

May cause irritation of respiratory tract.

Ingestion:

No information available. Expected to be a low hazard for usual industrial handling.

Chronic Potential Health Effects:

Component	Carcinogen Status:
1,2-Decanediol 1119-86-4 (100)	No information available

Target Organs:	No information available
Teratogenic Effects:	No information available
Mutagenic Effects:	No information available
Aggravated Medical Conditions:	No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
1,2-Decanediol	1119-86-4	100

4. FIRST AID MEASURES

General Advice:	Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye 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.	
Notes to Physician:	Treat symptomatically	
5. FIRE-FIGHTING MEASUR	RES	
Flammable Properties		
Flashpoint (°C/°F):	>113 °C/>235.40 °F	
Tested according to: Closed cup		
Lower Explosion Limit (%):	No information available	
Upper Explosion Limit (%):	No information availabl	e
Autoignition Temperature (°C/°F)	: Not applicable.	
Suitable Extinguishing Media:		Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.
Unsuitable Extinguishing Media:		No information available.
Hazardous Combustion Products	5:	Carbon monoxide; Carbon dioxide
Specific hazards:		May be combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
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
Specific Methods:		No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Remove all sources of ignition.

Environmental Precautions:

No information available.

Methods for Cleaning Up:

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. All equipment used when handling the product must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

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

Storage

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 Products:

Oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Eye protection:	Safety glasses. Safety glasses with side-shields.	
Skin and body protection:	on: Long sleeved clothing. Chemical resistant apron. Gloves.	
Respiratory protection:	Effective dust mask. Wear respirator with dust filter	
Hygiene measures:	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.	

National occupational exposure limits

United States

U.S Occupational Exposure Limits: Not determined

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
	None	None	None	None
1,2-Decanediol - 1119-86-4				

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
1,2-Decanediol	None	None	None	None
1119-86-4				

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
1,2-Decanediol	None	None
1119-86-4		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid.

Odor: No information available

Flash point (°C): >113

Autoignition Temperature (°C/°F): No information available

Boiling point/range(°C/°F): 255 °C/491 °F

Density (g/cm3): No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Solubility: No information available

Appearance: Powder.

Taste No information available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Bulk density: No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available Color: White.

Molecular/Formula weight: 174.28

Upper Explosion Limit (%): No information available

Melting point/range(°C/°F): 48-50 °C/118-122 °F

Specific gravity: No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Miscibility: No information available

10. STABILITY AND REACTIVITY		
Stability:	Stable at normal conditions	
Conditions to avoid:	Heat. Avoid dust formation. Dust may form explosive mixture in air. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.	
Materials to avoid:	Strong oxidising agents.	
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide.	
Possibility of Hazardous Reactions:	No information available	
Polymerization:	Hazardous polymerisation does not occur	
Corrosivity:	No information available	
Special Remarks on Corrosivity:	No information available	

11. TOXICOLOGICAL INFORMATION Acute Toxicity

Component Information

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1,2-Decanediol - 1119-86-4
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LD50/oral/rat = No information available

LD50/oral/mouse = No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No infomation available Other LD50 or LC50information = No information available

Product Information

LC50/inhalation/rat = No information available LC50/Inhalation/mouse = No information available LD50/dermal/rabbit = No information available LD50/dermal/rat = No information available LD50/oral/mouse = No information available

LD50/oral/rat = No information available

Local Effects	
Skin irritation:	May cause skin irritation.
Eye irritation:	Contact with eyes may cause irritation.
Inhalation:	May cause irritation of respiratory tract.
Ingestion:	Health injuries are not known or expected under normal use.
Sensitization:	No information available

No information available.

- **Chronic Toxicity**
- Chronic Toxicity No information available.

Carcinogenic effects:

Com	ponents	NTP	IARC	OSHA HCS - Carcinogens	ACGIH - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
1,2-Decaned	diol	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects:	No information available
Reproductive Effects:	No information available
Teratogenic Effects:	No information available
Target Organs:	No information available

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals:		No information available
Ecotoxicity effects:	No data available.	
Aquatic toxicity:	No information availabl	le
Mobility:	No information available	le

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

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	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
1,2-Decanediol	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	None
Subsidiary Risk:	Not applicable
Marine Pollutant	No data available
ERG No:	No information available
DOT RQ (lbs):	No information available
G (Canada)	

TDG (Canada)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available

ADR

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Classification Code:	No information available
Description:	No information available
CEFIC Tremcard No:	No information available

IMO / IMDG

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Description:	No information available
IMDG Page:	No information available
Marine Pollutant	No information available
MFAG:	No information available
Maximum Quantity:	No information available

RID		
	UN-No:	Not Regulated
	Proper Shipping Name:	No information available
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk:	No information available
	Classification Code:	No information available
	Description:	No information available
ICAC	n en	
ICAC	, UN-No:	Not Regulated
	Proper Shipping Name:	No information available
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk:	No information available
	Description:	No information available
	Description.	
ΙΑΤΑ		
	UN-No:	Not Regulated
	Proper Shipping Name:	No information available
	Hazard Class:	No information available
	Packing Group:	No information available
	Subsidiary Risk:	No information available
	• • • • •	NI 1 6 11 11 11

15. REGULATORY INFORMATION

International Inventories

Description:

Components	U.S. TSCA	Philippines (PICCS)	KOREA KECL	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
1,2-Decanediol	Not Listed	Not present	KE-09436	Not present	Present	Present	214-288-2

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcment Act of 1986.

Chemicals Known to the State of California to Cause Cancer: This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

No information available

Chemicals Known to the State of California to Cause Reproductive Toxicity: This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity		Female Reproductive Toxicity:
1,2-Decanediol	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

	Substances and their	Section 302 Extremely Hazardous Substances and TPQs	Hazardous	Chemical Category	Section 313 - Reporting de minimis
	Reportable Quantities	Substances and IT was	Substances and Nes		
1,2-Decanediol	None	None	None	None	None

U.S. TSCA

	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
1,2-Decanediol	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
1,2-Decanediol	Not Listed	Not Listed

Components		CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
1,2-Decanediol	Not listed	Not listed

EU Classification

R-phrase(s) not determined

S -phrase(s) none

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: Not dangerous

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1-2004 standards.

Preparation Date	14-Sep-2012
Reason for revision:	Not applicable
Prepared by:	Sonia Owen
Literature reference:	No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.