# Material Safety Data Sheet

## 1-Dodecanethiol

### ACC# 96195

# Section 1 - Chemical Product and Company Identification

MSDS Name: 1-Dodecanethiol

Catalog Numbers: AC117620000, AC117620010, AC117620050, AC117625000, AC409230000,

AC409230020 AC409230020, AC409235000

**Synonyms:** Lauryl mercaptan; Dodecyl mercaptan; 1-Dodecyl mercaptan; n-Dodecyl mercaptan.

Company Identification:

Acros Organics N.V. One Reagent Lane Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01 For emergencies in the US, call CHEMTREC: 800-424-9300

# Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
112-55-0	1-Dodecanethiol	>98	203-984-1

## Section 3 - Hazards Identification

## **EMERGENCY OVERVIEW**

Appearance: colorless to light yellow clear liquid. Flash Point: 87 deg C.

**Warning!** Causes eye, skin, and respiratory tract irritation.

**Target Organs:** Respiratory system, eyes, skin.

#### **Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled.

**Chronic:** Repeated exposure may cause sensitization dermatitis.

## Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the

upper and lower eyelids. Get medical aid imme diately.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

# Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Combustible liquid and vapor.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** 87 deg C ( 188.60 deg F)

**Autoignition Temperature:** 230 deg C ( 446.00 deg F)

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not let this chemical enter the environment.

# Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container.

# Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1-Dodecanethiol	0.1 ppm TWA	none listed	none listed

**OSHA Vacated PELs:** 1-Dodecanethiol: No OSHA Vacated PELs are listed for this chemical.

## **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if

exposure limits are exceeded or if irritation or other symptoms are experienced.

# Section 9 - Physical and Chemical Properties

Physical State: Clear liquid

Appearance: colorless to light yellow

**Odor:** stench **pH:** Not available.

Vapor Pressure: 2.5 mm Hg @ 25 deg C

Vapor Density: 6.9 (air=1) Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: 266 - 283 deg C @ 760 mm Hg

Freezing/Melting Point:-7 deg C

**Decomposition Temperature:**350 deg C

Solubility: Immiscible.

Specific Gravity/Density:.840 g/ml @ 20°C

Molecular Formula:C12H26S Molecular Weight:202.40

# Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents, bases, alkali metals. **Hazardous Decomposition Products:** Carbon monoxide, oxides of sulfur, carbon dioxide.

**Hazardous Polymerization:** Has not been reported.

# Section 11 - Toxicological Information

RTECS#:

CAS# 112-55-0: JR3155000

### LD50/LC50:

Not available.

## **Carcinogenicity:**

CAS# 112-55-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** 45 patients identified with contact dermatitis as a result of wearing shoes containing synthetic polymers were patch tested for responsiveness to dodecanethiol. The test involved application of a patch containing a 0.1% solution in toluene. 15 showed anallergic reaction, 8 showed irritation, and 22 did not react.

Teratogenicity: No information found

Reproductive Effects: No information found

**Mutagenicity:** Mutagenic effects have occurred in experimental animals.

**Neurotoxicity:** No information found

Other Studies:

# Section 12 - Ecological Information

**Ecotoxicity:** No data available. No information available.

Environmental: No information available.

**Physical:** No information available. **Other:** Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

# Section 14 - Transport Information

	US DOT	Canada TDG	
Shipping Name:	Aviation Regulated Liquid, N.O.S.	Aviation Regulated Liquid, N.O.S.	
Hazard Class:	9	9	
UN Number:	UN3334	UN3334	
Packing Group:			

# Section 15 - Regulatory Information

### **US FEDERAL**

#### **TSCA**

CAS# 112-55-0 is listed on the TSCA inventory.

## **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

## **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

## **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

#### **SARA Codes**

CAS # 112-55-0: immediate.

**Section 313** No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 112-55-0 can be found on the following state right to know lists: Pennsylvania.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

# European Labeling in Accordance with EC Directives

## **Hazard Symbols:**

ΧI

### **Risk Phrases:**

R 36/37/38 Irritating to eyes, respiratory system and skin.

#### **Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

## WGK (Water Danger/Protection)

CAS# 112-55-0: No information available.

## Canada - DSL/NDSL

CAS# 112-55-0 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of D2B, B3.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

## **Canadian Ingredient Disclosure List**

## Section 16 - Additional Information

**MSDS Creation Date:** 9/02/1998 **Revision #4 Date:** 6/25/2007

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