Name:	1 9-Nonanediol 99% Material Safety Data Sheet		
Synonym:	Nona-1,9-diol; Nonane-1,9-dio		
CAS:	3937-56-2		

1,9-Nonanediol 3937-56-2 MSDS

Section 1 - Chemical Product MSDS Name:1 9-Nonanediol 99% Material Safety Data Sheet Synonym:Nona-1,9-diol; Nonane-1,9-dio

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
3937-56-2	1,9-Nonanediol	99	223-517-5

Hazard Symbols: None Listed. Risk Phrases: None Listed.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW The toxicological properties of this material have not been fully investigated. Potential Health Effects Eye: May cause eye irritation. Skin: May cause skin irritation. Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated. Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. Chronic: No information found. Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid. 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:

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

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 ventilation to keep airborne concentrations low.

Exposure Limits CAS# 3937-56-2: Belgium - TWA: (listed as nonane): 200 ppm VLE; 1065 mg/m3 VLE France - VME: (listed as nonane): 200 ppm VME; 1050 mg/m3 VME Germany: (listed as nonane): 200 ppm VME; 1050 mg/m3 VME Japan: (listed as nonane): 200 ppm OEL; 1050 mg/m3 OEL Malaysia: (listed as nonane): 200 ppm TWA; 1050 mg/m3 TWA Netherlands: (listed as nonane): 200 ppm MAC; 1050 mg/m3 MAC Spain: (listed as nonane): 200 ppm VLA-ED; 1065 mg/m3 VLA-ED 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:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystals Color: white Odor: None reported. pH: Not available. Vapor Pressure: Not available. Viscosity: Not available. Boiling Point: 177 deg C @ 15.00mm Hg Freezing/Melting Point: 44 - 48 deg C Autoignition Temperature: Not applicable. Flash Point: $> 110 \deg C (> 230.00 \deg F)$ Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: Not available. Solubility in water: Not available. Specific Gravity/Density: Not available. Molecular Formula: C9H20O2 Molecular Weight: 160.26

Section 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures. Conditions to Avoid: Incompatible materials, strong oxidants. Incompatibilities with Other Materials: Acid chlorides, acid anhydrides, oxidizing agents, chloroformates, reducing agents. Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide. Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#: CAS# 3937-56-2 unlisted. LD50/LC50: Not available. Carcinogenicity: 1,9-Nonanediol - Not listed by ACGIH, IARC, or NTP.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA Not regulated as a hazardous material. IMO Not regulated as a hazardous material. RID/ADR Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: Not available. Risk Phrases: Safety Phrases: S 24/25 Avoid contact with skin and eyes. WGK (Water Danger/Protection) CAS# 3937-56-2: No information available. Canada CAS# 3937-56-2 is listed on Canada's NDSL List. CAS# 3937-56-2 is not listed on Canada's Ingredient Disclosure List. US FEDERAL TSCA CAS# 3937-56-2 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A