

Material Safety Data Sheet

Section 1: PRODUCT AND COMPANY IDENTIFICATION

bioMérieux, Inc.
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Hazelwood, MO 63042
For Information call: 1-800-638-4835

EMERGENCY CONTACT
1-314-854-0344
Or Contact Your Local
Poison Control Center

Product Number: 70490

Product Name: NINHYDRIN ; *NIN*

Synonyms: 2-methoxyethanol - ethylene glycol methyl ether, ethylene glycol monomethyl ether, methyl cellosolve

Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Component	Percentage	Exposure Limits
109-86-4	2-Methoxyethanol	96.5%	25 ppm PEL-TWA skin 5 ppm TLV-TWA skin
485-47-2	Ninhydrin	3.5%	None established

PEL=OSHA Permissible Exposure Limit. TLV= ACGIH Threshold Limit Value. TWA=time weighted average.

Section 3: HAZARDS IDENTIFICATION

U.S. PRECAUTIONARY LABELING

WARNING!

Combustible! May cause irritation to the eyes and skin. Inhalation of may cause upper respiratory irritation, dizziness, nausea, narcosis. Absorbed through the skin. Possible reproductive hazard. Do not get in eyes, on skin or clothing. Do not breathe vapors. Keep away from heat, sparks, and flames.

INTERNATIONAL LABELING

Flammable. Harmful by inhalation, in contact with the skin and if swallowed. May impair fertility. May cause harm to the unborn child. Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show label if possible).

EU Classification: Toxic, Flammable

R and S Phrases: R10, R20/21/22, R60, R61, S53, S45

HEALTH HAZARDS:

Inhalation: Inhalation of vapors or mists may cause irritation to the mucous membranes and upper respiratory tract, headache, dizziness, nausea and narcosis.

Skin Contact: Contact may cause mild irritation. Readily absorbed through the skin causing symptoms similar to inhalation exposures.

Eye Contact: Contact may cause irritation and temporary corneal clouding.

Ingestion: May cause abdominal pain, vomiting, dizziness, blurring of vision, back pain, convulsions and coma. Kidney damage, cardiac failure and pulmonary edema may develop.

Chronic Health Hazards: Chronic exposure to 2-methoxyethanol may cause damage to the liver, kidneys, central nervous system and blood system. 2-Methoxyethanol has been found to cause birth defects.

Carcinogen Status: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing respiratory, liver, kidney or blood disease may be at increased risk from exposure to this product.

Section 4: FIRST AID MEASURES

N/D = Not Determined

N/A = Not Applicable
MSDS Number: 410022-5

Inhalation: Immediately remove the victim to fresh air. If breathing has stopped administer artificial respiration. Get immediate medical attention.

Skin Contact: Immediately remove contaminated clothing. Flush contacted area with large amounts of water for at least 15 minutes. Get immediate medical attention.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open to assure that the entire surface is flushed. Get immediate medical attention.

Ingestion: Immediately call poison control and follow their instructions. Never give anything by mouth to an unconscious or convulsing person. If conscious, give 1 to 2 glasses of water and induce vomiting. Get immediate medical attention.

Section 5: FIRE FIGHTING MEASURES

Flash Point (Method Used): 108 F / 42 C

Autoignition Temp: 550 F/285 C

Flammable Limits: LEL: 2.3% UEL: 24.5%

Extinguishing Media: Dry chemical, CO2, water spray or alcohol foam.

Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus and full protective clothing.

Unusual Fire and Explosion Hazards: Combustible and forms explosive mixtures with air. Can react with air or oxidizers to form explosive peroxides.

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Section 6: ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. Wear protective equipment (gloves, respirator, suit, goggles). Collect spill with sand or other non-combustible absorbent, place in container for disposal.

Section 7: HANDLING AND STORAGE

Follow the directions on the package insert. Follow prudent laboratory practices of avoiding contact (breathing, touching, smoking ...) with a laboratory reagent. Avoid breathing vapors. Avoid contact with the skin and eyes.

Follow storage instructions on the product label. Keep away from all sources of ignition.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Use only in well ventilated area.

Respiratory Protection: If exposures exceed the occupational exposure limits wear an approved organic vapor respirator or supplied air respirator.

Gloves: Impervious gloves such as butyl rubber.

Eye Protection: Chemical safety goggles.

Other Protective Equipment/Clothing: Appropriate impervious clothing as needed to prevent contact.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Light amber liquid with a mild ethereal odor. The odor threshold for 2-methoxyethanol is reported to be 0.2 ppm in air.

pH: N/A

Vapor Pressure: 6.2 mmHg @ 20 C

Vapor Density: 2.62

Evaporation Rate: Approx. 1

Water Solubility: Complete

Boiling Point (F): 255 F / 124.5 C

Melting Point (F): N/A/V

Percent Volatile: 96.5%

Specific Gravity: 0.92

Coefficient of Oil/Water: N/D

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Avoid excessive heat and all sources of ignition.

Incompatibility: Strong oxidizers. 2-Methoxyethanol reacts in air to form highly explosive peroxides.

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

Hazardous Polymerization: Does not occur.

Section 11: TOXICOLOGICAL INFORMATION

2-Methoxyethanol: Oral rat LD50: 2370 mg/kg; Inhalation rat LC50: 1500 ppm/7 hr. Mutation Data. Reproductive Effects Data.

Ninhydrin: Ipr mouse LD50: 78 mg/kg.

Section 12: ECOLOGICAL INFORMATION

2-Methoxyethanol: LD50 Goldfish: >5000 mg/L 24 hr.

2-Methoxyethanol: LC50 Rainbow trout fingerlings: 15,520 ppm/96 hr 12 deg C.

Section 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of product in accordance with all local, state/provincial and federal regulations.

Container Disposal: Empty containers should be collected for proper disposal.

Section 14: TRANSPORT INFORMATION

U.S. DOT HAZARD CLASSIFICATION

Proper Shipping Name: Ethylene glycol monomethyl ether

Technical Name:

UN Number: UN1188

Hazard Class/Packing Group: 3, PG III

Labels Required: Flammable liquid

DOT Packaging Requirements: 49 CFR 173.203 and 49 CFR 173.242

Exceptions: 49 CFR 173.150

IATA/CAO AIR TRANSPORTATION

Proper Shipping Name: Ethylene glycol monomethyl ether

Technical Name:

UN Number: UN1188

Hazard Class/Packing Group: 3, III

Labels Required: Flammable liquid (60-220 L - Cargo Aircraft Only)

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IATA Packaging Requirements: Passenger Aircraft-309; Cargo Aircraft-310

Comment: Up to 180-5 mL bottles in a package can be shipped under IATA as "Dangerous Goods in Excepted Quantities". Kits in packages that do not exceed a gross mass of 64 lbs can be shipped under DOT (173.4) as excepted small quantities (inner receptacle max 30 mL).

Section 15: REGULATORY INFORMATION

SARA 311/312: Hazard Categories for SARA 311/312 Reporting: Acute health, chronic health, fire hazard

SARA 313: This Product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Section 313 (40 CFR372):

2-Methoxyethanol (glycol ether) 96.5%

CERCLA Section 103 Reportable Quantity: N/A

California Proposition 65:

This product contains the following substances known to the State of California to cause cancer and/or reproductive harm:

2-Methoxyethanol (ethylene glycol monomethyl ether) (developmental toxin, male reproductive toxin).

Canadian WHMIS Classification: Class B-3, Class D-2-A

Section 16: OTHER INFORMATION

NFPA Hazard Rating: Health: 2 Fire: 2 Reactivity: 0

Revision Summary: Added transportation information (Section 14).

CREATION DATE: 3/24/1993

REVISION DATE: 2/5/2003

The above information is believed to be correct as of the date of this sheet but does not purport to be all inclusive and shall be used only as a guide. Since the use of this information and the conditions of use of the product are not within the control of bioMérieux S.A. nor bioMérieux, Inc., it is the users obligation to assure safe use of this product.

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