



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name B-0108 Solvent Blend
Version # 01
Revision date 08-03-2012
CAS # Mixture
Product code 0300067
Manufacturer information Superior Oil Company, Inc.
 1402 North Capitol Avenue, Suite #100
 Indianapolis, IN 46202 United States
 Information (317) 781-4400
 Emergency (317) 781-4400

2. Hazards Identification

OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.
Eyes Causes eye irritation. Avoid contact with eyes.
Skin Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Avoid contact with the skin.
Inhalation Irritating to respiratory system. Overexposure to vapors or mist may cause irritation to the respiratory system. Repeated Inhalation of high levels of vapors or mist of Ethylene Glycol for prolonged periods of time may also result in toxic effects.
Ingestion Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness, liver damage, irritation, reproductive effects, nerve damage, convulsions, edema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100 ml.
Target organs Central nervous system. Kidneys. Liver. Respiratory System. Skin.
Chronic effects Edema. Jaundice. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Proteinuria. Irritation of eyes and mucous membranes. Irritating to mouth, throat, and stomach. Defatting of the skin. Skin irritation. Rash. Birth defects.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol	107-21-1	90 - 100
Inhibitor	Mixture	< 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact Wash off with warm water and soap. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.
Inhalation Move to fresh air. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If ingestion of a large amount does occur, call a poison control center immediately.

Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures**Flammable properties**

Not flammable by OSHA criteria. Not combustible by OSHA criteria.

Extinguishing media**Suitable extinguishing media**

Water fog. Carbon dioxide (CO₂). Alcohol resistant foam. Powder.

Unsuitable extinguishing media

Water. Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters**Protective equipment and precautions for firefighters**

Wear suitable protective equipment.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Hazardous combustion products

May include oxides of nitrogen.

6. Accidental Release Measures**Personal precautions**

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them.

Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use water spray to reduce vapors or divert vapor cloud drift. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Methods for cleaning up

This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Clean contaminated surface thoroughly. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

7. Handling and Storage**Handling**

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling.

Storage

Keep away from heat, sparks and open flame. Store in a well-ventilated place. Keep container tightly closed. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage.

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values****Components****Type****Value****Form**

Ethylene Glycol (107-21-1)

Ceiling

100 mg/m³

Aerosol.

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye / face protection**

Avoid contact with eyes. Chemical goggles are recommended. Eye wash fountain is recommended.

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Skin protection	Avoid contact with the skin. Wear appropriate chemical resistant clothing. Chemical resistant gloves.
Respiratory protection	Wear positive pressure self-contained breathing apparatus (SCBA).
General hygiene considerations	Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Clear.
Physical state	Liquid.
Form	Liquid.
Color	Blue.
Odor	None.
Boiling point	212 °F (100 °C) approx.
Flash point	232 °F (111.1 °C) (Ethylene Glycol)
Evaporation rate	< 1 (Butyl Acetate = 1)
Specific gravity	1.120
Vapor pressure	1.08 hPa (1 hPa = 0.75006 mmHg)
Vapor density	> 1 (Air = 1)
Solubility (water)	Complete.
VOC	94.51 % approx.
Other data	
Pounds per gallon	9.3341 lb/gal

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal conditions.
Conditions to avoid	Extreme heat will ignite in air @ 748 F. Do not store at temperatures above 120 F. Avoid extremely high temperatures.
Incompatible materials	Strong oxidizers. Strong acids.
Hazardous decomposition products	Carbon monoxide, carbon dioxide and other toxic gas.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Toxicological data	Test Results
Components	
Ethylene Glycol (107-21-1)	Acute Dermal LD50 Rabbit: 9530 mg/kg Acute Oral LD50 Cat: 1650 mg/kg Acute Oral LD50 Dog: 5500 mg/kg Acute Oral LD50 Dog: > 8.81 g/kg Acute Oral LD50 Guinea pig: 8.2 g/kg Acute Oral LD50 Mouse: 14.6 g/kg Acute Oral LD50 Rat: 5.89 g/kg Acute Other LD50 Mouse: 5.8 g/kg Acute Other LD50 Rat: 2800 mg/kg
Sensitization	Not available.
Local effects	Components of the product may be absorbed into the body through the skin. Liver toxicity. Irritating to respiratory system. Irritating to eyes. Irritating to skin.
Chronic effects	Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.
Subchronic effects	Kidney injury may occur.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

Ethylene Glycol (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

Skin corrosion/irritation	Irritating to skin. Not available.
Epidemiology	Hazardous by OSHA criteria.
Mutagenicity	Not available.
Neurological effects	Hazardous by OSHA criteria.
Reproductive effects	Hazardous by OSHA criteria. Possible reproductive hazard. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility.
Teratogenicity	Not available.
Further information	Reproductive toxicity. Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Components	Test Results
Ethylene Glycol (107-21-1)	LC50 Fathead minnow (<i>Pimephales promelas</i>): 8050 mg/l 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability	Not available.
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13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT BULK:

Basic shipping requirements:

UN number	3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s., (Ethylene Glycol)
Hazard class	9
Packing group	III
Reportable Quantity:	5319 lbs.
ERG code	171

DOT NON-BULK:

Not regulated in a container less than 119 gallons.

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
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Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

ETHYLENE GLYCOL (CAS 107-21-1)

1.0 %
Listed.**CERCLA (Superfund) reportable quantity**

Ethylene Glycol: 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance
No

Section 311 hazardous chemical
No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - New Jersey RTK - Substances: Listed substance

Ethylene Glycol (CAS 107-21-1) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Ethylene Glycol (CAS 107-21-1) Listed.

16. Other Information

Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 2Flammability: 1Physical hazard: 0
NFPA ratings	Health: 2Flammability: 1Instability: 0
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This data sheet contains changes from the previous version in section(s):	This document has undergone a significant changes and should be reviewed in its entirety.
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