

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072



IDENTITY (As Used on Label and List)
PATTERN RELEASE 202

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name National Engineering Products Inc.	Emergency Telephone Number (800) 274-5263
Address (Number, Street, City, State, and ZIP Code) 5110 Ridgely Road, Suite 411 Bethesda MD 20816	Telephone Number for Information (301) 656-1688
	Date Prepared August 16, 2001
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Methylene Chloride (CAS# 75-09-2)	25	50	STEL 125 PPM	56
Propane (CAS# 74-98-6)		1000		34
Iso-Butane (CAS# 75-28-5)		1000		8

N.F.P.A. Registry: 2-1-0
HNIS: 2-1-OC+
UN: 1593

Section III — Physical/Chemical Characteristics

Boiling Point Methylene Chloride	104 °F 40 °C	Specific Gravity (H ₂ O = 1) Methylene Chloride	1.32
Vapor Pressure (mm Hg.) at 20 °C Methylene Chloride	340	Melting Point	N/A
Vapor Density (AIR = 1) Methylene Chloride	2.9	Evaporation Rate (Butyl Acetate = 1) (CCl ₄ =1)	1.47

Solubility in Water
Slight
Appearance and Odor
Colorless liquid-sweetish organic odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) Iso-Butane -83 °C	Flammable Limits Iso-Butane	LEL 1.8	UEL 8.4
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Extinguishing Media
Foam or water
Special Fire Fighting Procedures
Methylene Chloride emits fumes when involved in a fire. Remove from area.
Use water spray on cans to keep them from overheating.

Unusual Fire and Explosion Hazards
Aerosol cans may detonate when exposed to fire.

Reproduce locally)

Distributed By:
FREEMAN Mfg. & Supply Co.
1101 MOORE ROAD
AVON, OHIO 44011-1011 (800) 321-8511

Stability	Unstable		Conditions to Avoid Exposure to high temperatures such as open flames and welding arcs.
	Stable	X	
Incompatibility (Materials to Avoid), Strong oxidizers and caustics. Chemically active metals such as aluminum or magnesium powders, sodium and potassium.			
Hazardous Decomposition or Byproducts Decomposition by flame or hot surfaces will form corrosive mists (hydrochloric acid) and toxic gas (Phosgene)			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation? Possible	Skin? Possible	Ingestion? Unlikely
Health Hazards (Acute and Chronic) Inhalation-overexposure may cause headaches, dizziness, nausea, dullness			
Skin- Produces redness and pain			
Ingestion- Causes abdominal pain (metabolizes in the body to produce carbon monoxide)			
Carcinogenicity:	NTP? Not Listed	IARC Monographs? *	OSHA Regulated? No
*Evidence in humans is inadequate (IARC Monographs supplement 7 1987)			
Signs and Symptoms of Exposure Over 1000 PPM can cause anaesthetic or narcotic effects			
Over 10000 PPM for prolonged time can cause unconsciousness and even death			
Medical Conditions Generally Aggravated by Exposure Cardiovascular disease			
Do not wear contact lenses			
Emergency and First Aid Procedures Inhalation- remove from area and give artificial respiration. Keep warm.			
Skin- Wash with soap and water. Eyes- Flush with water for 15 minutes (also under eyelids)			

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled Collect in suitable containers or absorb with an inert absorbant.	
Ventilate area as much as possible.	
Waste Disposal Method Comply with local, state and federal regulations.	
Precautions to Be Taken in Handling and Storing Keep away from high heat or open flames	
Other Precautions High concentrations in air cause a deficiency of oxygen with the related health risks.	

Section VIII — Control Measures

Respiratory Protection (Specify Type) Self contained breathing apparatus in heavy vapor of dangerously high concentrations			
Ventilation	Local Exhaust	Recommended	Special
	Mechanical (General)	Recommended	Other
Protective Gloves Polyethylene lined or viton		Eye Protection Chemical goggles	
Other Protective Clothing or Equipment			
Work/Hygienic Practices Wash skin and clothing that contact material.			

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