

#### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### **Material Name**

Pattern Release 202

#### **Product Use**

Used in preparing molds

#### **Restrictions on Use**

None reported.

#### **Manufacturer Information**

National Engineering Products, Inc. 5110 Ridgefield Road, Suite 411

Bethesda, MD 20816

Phone: 301-656-1688, Fax: 301-907-8948 Emergency Phone #: 202-526-6274 E-mail: nepi.customerservice@gmail.com

#### Section 2 - HAZARDS IDENTIFICATION

#### Classification in accordance with paragraph (d) of 29 CFR 1910.1200.

Flammable Aerosols - Category 1

Acute Toxicity - Oral - Category 4 (46.982% unknown)

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Carcinogenicity - Category 1B

Specific Target Organ Toxicity - Single Exposure - Category 1 (central nervous system, respiratory system)

Specific Target Organ Toxicity - Single Exposure - Category 3

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (central nervous system, liver)

#### **GHS Label Elements**

#### Symbol(s)







# Signal Word

Danger

#### **Hazard Statement(s)**

Extremely flammable aerosol Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause cancer

Causes damage to organs

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May cause drowsiness or dizziness

Causes damage to organs through prolonged or repeated exposure

#### **Precautionary Statement(s)**

#### **Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Keep away from heat/sparks/open flame/hot surfaces - No smoking

Pressurized container: Do not pierce or burn, even after use

Do not spray on an open flame or other ignition sources

Use only outdoors or in a well-ventilated area

Wear protective gloves/protective clothing/eye protection/face protection

Do not breathe dust/fume/gas/mist/vapours/spray

Wash thoroughly after handling

Do not eat, drink or smoke when using this product

#### Response

If exposed: Call a POISON CENTER or doctor/physician

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing

If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Specific treatment (see label)

#### Storage

Store in a well-ventilated place. Keep container tightly closed

Store in a secure area

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

#### **Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

#### Other Hazards

No additional information available.

#### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
75-09-2	Methylene chloride	30-60
8009-03-8	Petroleum jelly	1-5
68476-86-8	Petroleum gases, liquefied, sweetened	30-60

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#### Section 4 - FIRST AID MEASURES

#### **Description of Necessary Measures**

IF exposed or concerned: Call a POISON CENTER.

#### Inhalation

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

#### Skin

Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.

#### Eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

#### **Ingestion**

Do NOT induce vomiting. If swallowed, get medical attention.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

#### **Most Important Symptoms/Effects**

#### Acute

Harmful if swallowed. Cause skin irritation. Causes serious eye irritation. Causes damage to central nervous system, respiratory system. May cause drowsiness or dizziness.

#### **Delayed**

May cause cancer. Causes damage to organs through prolonged or repeated exposure: central nervous system, liver.

#### Section 5 - FIRE FIGHTING MEASURES

#### **Extinguishing Media**

#### **Suitable Extinguishing Media**

Use dry chemical, carbon dioxide, alcohol-resistant foam or water spray.

#### **Unsuitable Extinguishing Media**

None known.

#### **Special Hazards Arising from the Chemical**

Extremely flammable aerosol. Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

#### **Hazardous Combustion Products**

Hydrochloric acid, phosgene

### **Special Protective Equipment and Precautions for Firefighters**

May explode when heated. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flashback. Do not spray on an open flame or other ignition sources.

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#### **Fire Fighting Measures**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

#### Methods and Materials for Containment and Cleaning Up

Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. Ventilate affected area. Absorb with earth, sand or other non-combustible material and transfer to container. Large spills: Dike for later disposal. Dispose in accordance with all applicable regulations.

#### **Environmental Precautions**

Avoid release to the environment.

#### Section 7 - HANDLING AND STORAGE

#### **Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flame/hot surfaces - No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition sources. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.

#### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store in a secure area. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from incompatible materials.

#### **Incompatible Materials**

Strong oxidizing agents, caustic solutions, reactive

metals: aluminum powders, magnesium. powders, sodium, potassium

# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

# Methylene chloride 75-09-2 ACGIH: 50 ppm TWA NIOSH: 2300 ppm IDLH OSHA (US): 25 ppm TWA

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	125 ppm STEL (See 29 CFR 1910.1052) 15 min; 12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA (See 29 CFR 1910.1052)
	125 ppm STEL (See 29 CFR 1910.1052)
Mexico:	100 ppm TWA LMPE-PPT; 330 mg/m3 TWA LMPE-PPT
	500 ppm STEL [LMPE-CT]; 1740 mg/m3 STEL [LMPE-CT]

#### Biological limit value

There are no biological limit values for any of this product's components.

#### **Engineering Controls**

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

#### Individual Protection Measures, such as Personal Protective Equipment

### **Eye/face protection**

Wear chemical safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### **Skin Protection**

Wear appropriate work clothing.

#### **Respiratory Protection**

In case of inadequate ventilation wear respiratory protection.

#### **Glove Recommendations**

Wear appropriate gloves. Recommended material: Viton(R), polyethylene.

#### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless liquid	Physical State	aerosol
Odor	sweet,organic	Color	colorless
Odor Threshold	Not available	рН	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	104 °F (40 °C)
Freezing point	Not available	<b>Evaporation Rate</b>	1.47
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	-83 °C (iso-butane)
Lower Explosive Limit	1.8 % (iso-butane)	Decomposition	Not available
Upper Explosive Limit	8.4 % (iso-butane)	Vapor Pressure	340 mmHg (methylene chloride at 20 °C)
Vapor Density (air=1)	2.9 (methylene chloride)	Specific Gravity (water=1)	1.32 (methylene chloride)

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Water Solubility slightly soluble		Partition coefficient: n- octanol/water	Not available	
Viscosity	Not available	Solubility (Other)	Not available	
Density	Not available			

#### Other Information

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No additional information available.

#### Section 10 - STABILITY AND REACTIVITY

#### Reactivity

No reactivity hazard is expected.

#### **Chemical Stability**

Stable under normal conditions of use.

#### **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

#### **Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

#### **Incompatible Materials**

Strong oxidizing agents, caustic solutions, reactive

metals: aluminum powders, magnesium powders, sodium, potassium

#### **Hazardous decomposition products**

hydrochloric acid, phosgene

#### Section 11 - TOXICOLOGICAL INFORMATION

#### **Information on Likely Routes of Exposure**

#### Inhalation

May cause drowsiness or dizziness.

#### **Skin Contact**

Causes skin irritation.

#### **Eve Contact**

Causes serious eye irritation.

#### **Ingestion**

Harmful if swallowed. May cause abdominal pain.

#### **Acute and Chronic Toxicity**

#### **Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Methylene chloride (75-09-2)

Oral LD50 Rat 1600 mg/kg

Inhalation LC50 Rat 53 mg/L 6 h

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Petroleum jelly (8009-03-8) Dermal LD50 Rabbit 3600 mg/kg

# Preeman Manufacturing & Supply Co. www.freemansupply.com 800-321-8511 FREEMAN SDS ID: NEPI-003

#### **Immediate Effects**

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Causes damage to central nervous system, respiratory system. May cause drowsiness or dizziness.

#### **Delayed Effects**

May cause cancer. Causes damage to organs through prolonged or repeated exposure: central nervous system, liver.

#### **Irritation/Corrosivity Data**

Causes skin irritation. Causes serious eye irritation.

#### **Respiratory Sensitization**

No data available.

#### **Dermal Sensitization**

No data available.

#### **Component Carcinogenicity**

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Methylene chloride	75-09-2
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 110 [in preparation]; Monograph 71 [1999] (Group 2A (probably carcinogenic to humans))
NTP:	Reasonably Anticipated To Be A Human Carcinogen
DFG:	Category 3A (could be carcinogenic for man)
OSHA:	Present
OSHA:	see 29 CFR 1910.1052

#### **Germ Cell Mutagenicity**

No data available.

#### **Reproductive Toxicity**

No data available.

#### Specific Target Organ Toxicity - Single Exposure

Central nervous system, respiratory system

#### **Specific Target Organ Toxicity - Repeated Exposure**

Central nervous system, liver

#### **Aspiration hazard**

No data available.

#### **Medical Conditions Aggravated by Exposure**

Cardiovascular disorders

#### **Additional Data**

High concentrations may cause oxygen deficiency resulting in unconsciousness.

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#### Section 12 - ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Avoid release to the environment.

#### **Component Analysis - Aquatic Toxicity**

Methylene chloride	75-09-2
Fish:	LC50 96 h Pimephales promelas 140.8 - 277.8 mg/L [flow-through]; LC50 96 h Pimephales promelas 262 - 855 mg/L [static]; LC50 96 h Lepomis macrochirus 193 mg/L [static]; LC50 96 h Lepomis macrochirus 193 mg/L [flow-through]
Algae:	EC50 96 h Pseudokirchneriella subcapitata >500 mg/L EPA; EC50 72 h Pseudokirchneriella subcapitata >500 mg/L EPA
Invertebrate:	EC50 48 h Daphnia magna 1532 - 1847 mg/L [static] EPA; EC50 48 h Daphnia magna 190 mg/L IUCLID

#### **Persistence and Degradability**

No information available for the product.

#### **Bioaccumulative Potential**

No information available for the product.

#### Mobility

No information available for the product.

#### **Other Toxicity**

No additional information available.

#### Section 13 - DISPOSAL CONSIDERATIONS

#### **Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations. Empty containers may contain product residue. Do not incinerate.

#### Section 14 - TRANSPORT INFORMATION

US DOT Information: UN/NA #: Not regulated

**Additional information: ORM-D** 

**IATA Information: UN#:** Not regulated

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**TDG Information:** UN#: Not regulated



#### Section 15 - REGULATORY INFORMATION

#### **U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Methylene chloride	75-09-2
SARA 313:	0.1 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ

SARA Section 311/312 (40 CFR 370 Subparts B and C)

Acute Health: Yes Chronic Health: No Fire: Yes Pressure: Yes Reactivity: No

#### **U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Methylene chloride	75-09-2	Yes	Yes	Yes	Yes	Yes

# The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Methylene chloride	75-09-2
Carc:	carcinogen, initial date 4/1/88

#### **Canadian WHMIS Ingredient Disclosure List (IDL)**

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Methylene chloride	75-09-2		
	0.1 %		

#### **Component Analysis - Inventory**

Methylene chloride (75-09-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Petroleum jelly (8009-03-8)

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US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Petroleum gases, liquefied, sweetened (68476-86-8)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

#### Section 16 - OTHER INFORMATION

**HMIS Rating** 

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

**NFPA Ratings** 

Health: 2 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes** New SDS: March 19, 2015

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD -Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA -Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH -Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

#### **Other Information**

#### **Disclaimer:**

Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the

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quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

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