



Factor II, Incorporated

The Art, Science and Technology of
Silicones and Prosthetics...

Safety Data Sheet

Product Code: A-504-4

Revision Date: 2/8/2018

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER

Product Name Polyester Parfilm Paintable Mold Release

Product Code A-504-4

Intended Use(s) For professional use only

CONTACT INFORMATION FOR SUPPLIER OF SAFETY DATA SHEET

Factor II, Incorporated
5642 White Mountain Ave
PO Box 1339
Lakeside AZ 85929
928-537-8387
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EMERGENCY TELEPHONE NUMBERS

928- 368-7502

SECTION 2: HAZARD IDENTIFICATION

Classification of substance or mixture

Simple asphyxiants	Simple asphyxiants
Flam. Aerosol	Category 2 H223
Liquefied gas	H280
Muta 1B	H340

Label Elements – Pictograms, Signal Word, Hazard Statements, Precautionary Statements, & supplemental Information



Signal word

Danger

Hazard statements

H223 - Flammable aerosol.
H280 - Contains gas under pressure; may explode if heated.
H340 - May cause genetic defects.
May displace oxygen and cause rapid suffocation.



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Precautionary statements

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 If exposed, concerned, or feel unwell: Get medical advice/attention
- P377 Leaking gas fire: Do not Extinguish, unless leak can be stopped safely.
- P381 Eliminate all ignition sources if safe to do so
- P403 Store in a well-ventilated place
- P405 Store locked up
- P410+P403 Protect from sunlight. Store in a well-ventilated place
- P412 Do not expose to temperatures exceeding 50°C/122°F
- P501 Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Name	Product Identifier CAS No	%	Classification GHS-US
Dimethyl ether	115-10-6	50-60 %	Flam. Gas 1, H220 Liquefied gas, H280
1,1,1,2-Tetrafluoroethane	811-97-2	35-45 %	Simple Asphy Liquefied gas, H280
Naphtha, petroleum, hydrotreated light	64742-49-0	1-5 %	Skin Irrit. 2 H315 STOT SE3, H304 Asp. Tox. 1, H304
Siloxanes and Silicones	68037-77-4	1-5 %	N/A

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

SECTION 4: FIRST AID MEASURES

General

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Eye Contact

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.



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Skin Contact

Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Inhalation

When symptoms occur go into open air and ventilate suspected area. Get immediate medical advice/attention. Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

Ingestion

Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

Most important symptoms and effects

General

Gas can be toxic as a simple asphyxiant by displacing oxygen from the air. May cause frostbite.

Inhalation

In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness and death.

Skin Contact

May cause frostbite on contact with the liquefied gas.

Eye Contact

May cause eye irritation.

Ingestion

Ingestion is an unlikely route of exposure for a gas.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Do not extinguish burning gas if flow cannot be shut off immediately. Extinguish secondary FIRES with appropriate materials.

Unsuitable Extinguishing Media

Water may be ineffective. Do not use a heavy water stream. Use of heavy stream of water may spread fire.



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Special Hazards Arising From the Substance or Mixture

Fire Hazard

Flammable aerosol. Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.

Explosion Hazard

May form flammable/explosive vapor-air mixture. Heating may cause an explosion. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

Reactivity

Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire

Exercise caution when fighting any chemical fire.

Firefighting Instructions

Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leaking gas fire, eliminate all ignition sources if safe to do so.

Protection During Firefighting

Do not enter fire area without proper protective equipment, including respiratory protection. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid enter sewers or waterways.

Hazardous Combustion Products

Irritating fumes. Hydrogen Fluoride. Fluorine compounds. Carbon oxides (CO, CO₂). Silicon oxides. Metal oxides. Formaldehyde.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions. Protective Equipment and Emergency Procedures

General Measures



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Use special care to avoid static electric charges. Eliminate every possible source of ignition. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Ruptured cylinders may rocket.

For Non-Emergency Personnel

Protective Equipment Use appropriate personal protection equipment (PPE).

Emergency Procedures Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment Equip cleanup crew with proper protection.

Emergency Procedures

Ventilate area. Eliminate ignition sources. If possible, stop flow of product.

Environmental Precautions Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment Stop leak if safe to do so.

Methods for Clean Ing Up

Clear up spills immediately and dispose of waste safely. Stop the source of the release, if safe to do so. Consider the use of water spray to disperse vapors. Isolate the area until gas has dispersed. Ventilate and gas test area before entering.

Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Additional Hazards When Processed

When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard. Contact with the liquefied gas may cause frostbite. In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Exposed person may not be aware of asphyxiation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities



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Technical Measures

Proper grounding procedures to avoid static electricity should be followed.
Comply with applicable regulations. Cylinders should be stored upright with valve protection cap in place and firmly secured to prevent falling. Keep at temperatures below 52°C / 125°F.

Storage Conditions

Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep in fireproof place. Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Storage Area Keep away from sources of ignition - No smoking.

Specific End Use(s) Mold releasant

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Fluorides

Mexico	OEL TWA (mg/m ³)	2.5 (mg/m ³)
USA ACGIH	ACGIH TWA (mg/m ³)	2.5 (mg/m ³)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2.5 (mg/m ³)
Alberta	OEL TWA (mg/m ³)	2.5 (mg/m ³)
British Columbia	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Manitoba	OEL TWA (mg/m ³)	2.5 (mg/m ³)
New Brunswick	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Newfoundland & Labrador	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Nova Scotia	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Nunavut	OEL STEL (mg/m ³)	5 (mg/m ³)
Nunavut	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Northwest Territories	OEL TWA (mg/m ³)	5 (mg/m ³)
Northwest Territories	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Ontario	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Prince Edward Island	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Québec	VEMP (mg/m ³)	2.5 (mg/m ³)
Saskatchewan	OEL STEL (mg/m ³)	5 (mg/m ³)
Saskatchewan	OEL TWA (mg/m ³)	2.5 (mg/m ³)
Yukon	OEL STEL (mg/m ³)	2.5 (mg/m ³)
Yukon	OEL TWA (mg/m ³)	2.5 (mg/m ³)

Dimethyl ether (115-10-6)		
British Columbia	OEL TWA (ppm)	1000 ppm

Exposure Controls

Appropriate Engineering Controls



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Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases/vapors may be released. Oxygen detectors should be used when asphyxiating gases may be released. Proper grounding procedures to avoid static electricity should be followed. Ensure all national/local regulations are observed.

Personal Protective Equipment

Full protective flameproof clothing, Protective goggles, Gloves



Materials for Protective Clothing

Flame retardant antistatic protective clothing.

Hand Protection

Wear chemically resistant protective gloves.

Eye Protection

Chemical safety goggles.

Skin and Body Protection

use chemically protective clothing.

Respiratory Protection

Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Thermal Hazard Protection

If material is cold, wear thermally resistant protective gloves.

Other Information

When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (Based on typical material)

Information on basic physical and chemical properties

Physical State	Gas
Appearance	Clear Colorless Aerosol
Odor	Slight Ethereal
Odor Threshold	Not available
pH	Not available
Evaporation Rate	Not available
Melting Point	Not available
Freezing Point	Not available
Boiling Point	Not available
Flash Point	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Lower Flammable Limit	3.4% (Dimethyl ether)
Upper Flammable Limit	26.7% (Dimethyl ether)



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Vapor Pressure	72 psig
Relative Vapor Density at 20°C	Not available
Specific Gravity	<1
Solubility	Not available
Partition Coefficient: n-octanol/water	Not available
Viscosity	Not available
Explosion Data – Sensitivity to Mechanical Impact	Sensitive to mechanical impact
Explosion Data – Sensitivity to Static Discharge	Static discharge could act as an ignition source

SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity

Hazardous reactions will not occur under normal conditions.

Chemical Stability

Stable under recommended handling and storage conditions (see section 7). Can form explosive mixture with air. Contains gas under pressure; may explode if heated.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

Overheating. Heat. Sparks

Use special care to avoid static electric charges.

Incompatible Materials

Strong acids. Strong bases. Strong oxidizers. Aluminum. Finely divided metals. Magnesium. Alkali metals. Alkaline earth metals.

Hazardous Decomposition Products

Thermal decomposition generates toxic vapors and irritating fumes, Hydrogen fluoride, Fluorine compounds, Carbon oxides (CO, CO₂), Silicon oxides, Metal oxides, and Formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity	Not classified
LDSO and LCSO Data	Not available
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory or Skin Sensitization	Not classified
Germ Cell Mutagenicity	May cause genetic defects.



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Teratogenicity	Not available
Carcinogenicity	Not classified
Specific Target Organ Toxicity (Repeated Exposure)	Not classified
Reproductive Toxicity	Not classified
Specific Target Organ Toxicity (Single Exposure)	Not classified
Aspiration Hazard	Not classified
Symptoms/Injuries After Inhalation	

In elevated concentrations may cause asphyxiation, central nervous system effects, and increased breathing rate. Symptoms of asphyxiation include headache, dizziness, rapid breathing, increased pulse, mood changes, tremors, cyanosis, muscular weakness, narcosis, numbness of the extremities, unconsciousness, and death.

Symptoms/Injuries After Skin Contact	May cause frostbite on contact with the liquefied gas.
Symptoms/Injuries After Eye Contact	May cause eye irritation.
Symptoms/Injuries After Ingestion	Ingestion is an unlikely route of exposure for a gas.
Chronic Symptoms	May cause genetic defects.

Information on Toxicological Effects – Ingredients

1,1,1,2-Tetrafluoroethane (811-97-2)	
LC50 Inhalation Rat	1500 g/m ³ (Exposure time: 4 h)
Dimethyl ether (115-10-6)	
LC50 Inhalation Rat	308.5 mg/l/4h
Naphtha, petroleum hydrotreated light (64742-49-0)	
LD50 Oral Rat	>5000 mg/kg
LD50 Dermal Rabbit	>3160 mg/kg
LD50 Inhalation Rat	=73680 ppm
Siloxanes and Silicones (68037-77-4)	
LD50 Oral Rat	=>15000 mg/kg 4h

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

Naphtha, petroleum, hydrotreated light (64742-49-0)	
Crustacea	2.6:96 h Chaetogammarus marinus mg/L LC50

Persistence/Degradability	Not determined
Bioaccumulation	Not determined

Mobility

Dimethyl ether (115-10-6)	
Partition Coefficient	-0.18



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Other Adverse Effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Additional Information

Handle empty containers with care because residual vapors are flammable

SECTION 14: TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

	Consumer Commodity, ORM-D
UN/ID No	UN1950
Proper Shipping Name	Aerosols,
Hazard Class	2.1

IATA

UN/ID No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.2

IMDG

UN/ID No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.2

SECTION 15: REGULATORY INVORMATION

Parfilm Ultra 4 Mold Release

SARA Section 311/312 Hazard Classes

Immediate (acute) health hazard
Fire hazard
Delayed (chronic) health hazard

1,1,1,2-Tetrafluoroethane (811-97-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Naphtha, Petroleum, hydrotreated llrht (64742-49-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory



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US State Regulations

Fluorides
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
Dimethyl ether (115-10-6)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance list
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

Parfilm Ultra 4 Mold Release	
WHMIS Classification	Class B Division 5 - Flammable Aerosol Class A - Compressed Gas Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
  	
1,1,1,2-Tetrafluoroethane (811-97-2)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class A – Compressed Gas
Dimethyl ether (115-10-6)	
Listed on the Canadian DSL (Domestic Sustances List)	
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.	

SECTION 16: OTHER INFORAMTION

GHS Full Text Phrases: Asp. Tox. 1	Aspiration hazard Category 1
Flam. Aerosol 2	Flammable aerosol Category 2
Flam. Gas 1	Flammable gases Category 1
Liquefied gas	Gases under pressure liquefied gas
Muta. 18	Germ cell mutagenicity Category 18
Simple Asphy	Simple Asphyxiant
Skin Irrit. 2	Skin corrosion/irritation Category 2



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STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H223	Flammable aerosol
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects

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