SAFETY DATA SHEET
GENERAL PURPOSE FOAM

SECTION 1. IDENTIFICATION

Product name: F4P FOAM
Product code: 0307-6110
Synonyms: General purpose insulating foam sealant.
REACH Registration Number: No data available.
Relevant identified uses of the substance or mixture and uses advised against
General use: General purpose fill foam; insulating foam sealant.
Uses advised against: None known.
Details of the supplier and of the safety data sheet
Manufacturer: F4P, 11675 SW Tom Mackie Blvd, Port St. Lucie, FL 34987 Company Phone: 772-878-4944

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

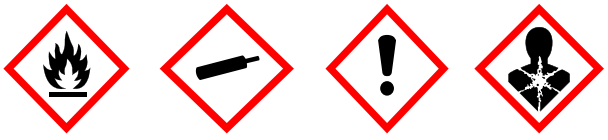
Product definition: Mixture.

Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable gases - Category 1 [H220]
Gases under pressure - Compressed gas [H280]
Skin irritation - Category 2 [H315]
Skin sensitization - Category 1 [H317]
Eye irritation - Category 2A [H319]
Acute toxicity, inhalation - Category 4 [H332]
Respiratory sensitization - Category 1 [H334]
Specific target organ toxicity, single exposure - Category 3 (STOT SE 3) [H335]
Carcinogen - Category 2 [H351]
Reproductive toxicity - Effects on or via lactation [H362]
Specific target organ toxicity, repeated exposure - Category 2; STOT RE 2 [H372]
Aquatic chronic - Category 4 [H413]

Label Elements

Hazard Symbol(s):



GHS02 GHS04 GHS07 GHS09

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Signal Word: Danger

Hazard statements:
H220 - Extremely flammable gas
H280 - Contains gas under pressure; may explode if heated
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H362 - May cause harm to breastfed children
H372 - May cause damage to the central nervous system, liver, lungs and skin
H413 - May cause long lasting harmful effects to aquatic life

Precautionary statements Prevention:
P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, open flames and hot surfaces. - No smoking.
P260 - Do not breathe dusts or mist.
P261 - Avoid breathing vapors and fumes.
P263 - Avoid contact during pregnancy or while nursing.
P264 - Wash hands and other skin areas exposed to material thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing and eye protection.

Response:
P285 - In case of inadequate ventilation wear respiratory protection.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 - IF exposed or concerned: Get medical advice.
P314 - Get medical attention if you feel unwell.
P321 - Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS. P333 + P313 - If skin irritation or rash occurs: Get medical attention.
P337 + P313 - If eye irritation persists: Get medical attention.
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
P362 - Take off contaminated clothing and wash before reuse.
P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - Eliminate all ignition sources if safe to do so.
P405 - Store locked up.

Storage: P405 - Store locked up.
P410 + P403 - Protect from sunlight. Store in a well-ventilated place.

Disposal: P501 - Dispose of contents and containers in accordance with national and local regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable.

Mixtures

Chemical characterization (preparation)

% by Weight	Ingredient	CAS #	EC #	Annex #	EC Classification
40 - 85	Urethane Pre-Polymer Blend (Non-Hazardous Polyol Blend)	Proprietary	-	-	-
5 - 10	High Oligomers of Methyl Diisocyanate (Polymeric MDI/ PMDI)	9016-87-9	500-079-6	-	-
5 - 10	4,4'-Diphenylmethane Diisocyanate (MDI)	101-68-8	202-966-0	615-005-00-9	Carc. Cat. 3, R40; Xn, R20, R48/20; Xi, R36/37/38; R42/43
7 - 18	Alkanes, C14 - C17, Chloro	85535-85-9	287-477-0	602-095-00-X	R53; R64
3 - 7	Isobutane	75-28-5	200-857-2	601-004-00-0	F+, R12
3 - 7	Dimethyl Ether	115-10-6	204-065-8	603-019-00-8	F+, R12
3 - 7	Propane	74-98-6	200-827-9	601-003-00-5	F+, R12

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to the health or the environment and hence require reporting in this section.

SECTION 4. FIRST AID MEASURES

Description of first aid measures

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight fitting clothing such as a collar, tie, belt or waistband. Seek medical attention immediately. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.

Eye contact: Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with finger tips and occasionally lifting the upper and lower lids. Use lukewarm water if possible. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. Do not attempt to remove cured material from eyes. Seek immediate medical attention, preferably from an ophthalmologist.

Skin contact: Flush skin with large amounts of water while removing contaminated clothing. Foam sticks to the skin. Gently wipe product from skin with a damp cloth and continue rinsing for at least 15 minutes. Use lukewarm water, if possible. For severe exposures, immediately get victim under a safety shower and begin rinsing. Wash contaminated clothing before reuse. Discard contaminated shoes. If skin irritation occurs or if rash develops, seek medical attention. Cured material is difficult to remove from skin, and attempting to remove it may damage skin.

Ingestion: Rinse mouth thoroughly with water if victim is conscious. Remove dentures, if any. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Obtain immediate medical attention. To prevent aspiration of swallowed product, lay victim on side with the head lower than the waist.

Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eye contact: Causes serious eye irritation with symptoms of redness, swelling, pain and tearing. Cured material may cause temporary corneal injury. Product vapor can cause transient eye irritation with burning and tearing.

Skin contact: Causes skin irritation with redness, itching and swelling. Can cause allergic skin reaction. Can cause sensitization. Persons previously sensitized can experience allergic skin reactions with symptoms of redness, itching, swelling and rash.

Inhalation: Diisocyanate or polyisocyanate mist or vapor at concentrations above the exposure limits or guidelines can irritate the mucous membranes in the respiratory tract with symptoms of burning sensation, runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (difficulty breathing). Persons with a pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills) has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible; however, increased lung sensitivity may persist for a longer period of time.
May be harmful if inhaled. Excessive inhalation of the propellant may cause anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Ingestion: May cause irritation of the mouth, throat and gastrointestinal tract with nausea, abdominal pain, vomiting and diarrhea. May be harmful if swallowed.

Chronic: Pre-existing disorders of the skin and respiratory system may be aggravated by exposure to this product. Prolonged vapor contact may cause conjunctivitis. Prolonged and repeated skin contact can cause redness, swelling, rash and possible skin sensitization. Animal tests and other research indicate that skin contact with diisocyanates can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates.
As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization (asthma or asthma-like symptoms) to diisocyanates or polyisocyanates that may cause them to react to a later exposure to these materials at levels well below the exposure limits or guidelines. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases, several years. Sensitization can be permanent. Chronic over-exposure to diisocyanates has also been reported to cause lung damage (including fibrosis, decrease in lung function) that may be permanent.
Persons with cardiac arrhythmia are more susceptible to increased medical risk from severe exposure to propellant.
Chlorinated Paraffins (C14 - C17) may cause harm to breastfed children. Refer to Section 12.2.

Indication of any immediate medical attention and special treatment needed
Advice to Doctor and Hospital Personnel

Eye Contact:	Stain eye for evidence of corneal injury. If the cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision.
Skin contact:	This material is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.
Ingestion:	Treat symptomatically; there is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the material.
Inhalation:	Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high propellant concentrations (e.g. in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe victim for the development of cardiac arrhythmias.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishable media

Suitable methods of extinction:	Use dry chemical, carbon dioxide, foam, Halon 1211 and water spray or fog.
Unsuitable methods of extinction:	Do not use water jets and high pressure as these may spread the fire.
Special hazards arising from the substance or mixture:	Contains flammable propellant. Eliminate ignition sources. Closed containers may explode due to the buildup of pressure when exposed to extreme heat. Aerosol cans exposed to fire or high temperature can rupture and rocket. When contents are contaminated with water (CO2 is formed). Cured foam will burn in the presence of heat, oxygen and ignition source. During a fire, isocyanate vapors, dense smoke and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanate can be dangerous. Exposure to heated diisocyanate can be dangerous. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain immediate medical attention.
Explosion hazards:	Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.
Advice for firefighters:	Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and hot diisocyanate can be vigorous. If possible, firefighters should control runoff water to prevent environmental contamination.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Evacuate non-essential personnel. Wear appropriate protective clothing designated in Section 8. Remove all sources of ignition. Ventilate the area. In poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to the displacement of oxygen.
Environmental precautions:	Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.
Methods and materials for containment and cleaning up:	Cover drains and contain spill. Uncured product is very sticky. Carefully scrape up material and place into an approved, open-head metal container for disposal. Never discard product in a liquid state. Allow material to cure before closing waste container for disposal. Remove residue by wiping contaminated area with solvents such as polyurethane cleaner, mineral spirits, acetone, paint thinner, etc. Cured product can be removed by scraping, buffing or other mechanical methods suitable for removing hardened films. Dispose of waste in accordance with all applicable guidelines and regulations.
Reference to other sections:	For indications about waste treatment, see Section 13.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:	Do not breathe vapors or mist. Use adequate ventilation to keep airborne isocyanate and propellant levels below exposure limits. Wear respiratory protection when spraying this material especially when used in a confined space, if the exposure limit is exceeded or if the material is heated. Warning symptoms (irritation of the eyes, nose or throat, or odor) are not adequate to prevent overexposure from inhalation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist. Avoid contact with skin and eyes by wearing appropriate eye and skin protection (see Section 8). Wash thoroughly after handling product. Do not breathe smoke and gases created by overheating or burning this material. Decomposition products can be highly toxic and irritating. Keep containers closed when not in use.
Advice on protection against fire and explosion:	Flammable propellant. Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.

Conditions for safe storage, including any incompatibilities: Store in a dry, well-ventilated area, away from incompatible materials (see Section 10.5), food and drink. Store between 15.5 - 26.6 °C (60 - 80 °F). Products stored below 24 °C (75 °F) or above 38 °C (100 °F) must be given adequate time to warm up or cool down prior to use. Do not expose containers to open flames or temperatures above 49 °C (120 °F) as storage at elevated temperatures can cause containers to rupture. Exposure to excessive heat can cause premature aging of components, resulting is shorter product shelf life. Keep from freezing. Storage below 10 °C (50 °F) may affect foam quality if chemicals are not warmed to room temperature prior to use. Protect containers against physical damage. Always store containers in an upright position. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep locked up and out of reach of children.

Specific end uses: Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

CAS #	Ingredient	OSHA PEL - TWA	ACGIH TLV	NIOSH
101-68-8	4,4'-Diphenylmethane Diisocyanate	0.02 ppm; 0.2 mg/m3 Ceil	0.005 ppm; 0.051 mg/m3 (8 hours) TWA	0.005 ppm; 0.050 mg/m3 TWA 0.02 ppm; 0.2 mg/m3 Ceil
75-28-5	Isobutane	-	1,000 ppm TWA	800 ppm; 1,900 mg/m3 TWA
115-10-6	Dimethyl Ether*	-	-	-
74-98-6	Propane	1,000 ppm; 1,800 mg/m3 TWA	1,000 ppm; 1,800 mg/m3 TWA	1,000 ppm; 1,800 mg/m3 TWA

* WEEL: 1,000 ppm; 1,800 mg/m3 TWA

Exposure controls:

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. When such controls are not feasible to achieve full protection, the use of respirators and other personal protective equipment is mandated. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Curing ovens must be ventilated to prevent emissions into the workplace. If oven off-gases are not vented properly (i.e. they are released into the work area), it is possible to be exposed to airborne monomeric HDI.

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Individual protection measures:	Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.
Hygiene measures:	Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees should be educated and trained in the safe use and handling of this product.
Eye/face protection:	Wear protective goggles or safety glasses with unperforated side shields. Use a full face shield where there is a greater risk of splashing or when high concentration of airborne mist is present. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.
Hand protection:	Wear Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC or Neoprene gloves, or gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.
Other protective equipment:	Avoid all skin contact. Depending of the conditions of use, cover as much of the exposed skin as possible with appropriate protective clothing to prevent skin contact. Wear gloves, long sleeved shirts, long pants without cuffs and boots if the situation requires.
Respiratory protection:	Use products only in a well ventilated area. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter (N95). If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). Use local and general exhaust ventilation to control levels of exposure. The odor and irritancy of this material are inadequate to warn of excessive exposure.

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Spray Operations:

Good industrial hygiene practice dictates that when isocyanate-based coatings are spray applied, some form of respiratory protection should be worn. During the spray application of coating containing this product the use of a supplied-air (either positive pressure or continuous flow-type) is mandatory when ONE OR MORE of the following conditions exist:
- the airborne isocyanate concentrations are not known
- the airborne isocyanate monomer concentrations exceed 0.05 ppm averaged over 8 hours (10 times the 8 hour TWA exposure limit)
-the airborne polyisocyanate (polymeric, oligomeric) concentrations exceed 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits)
- operations are performed in a confined space (see OSHA Confined Space Standard 29 CFR 1910.146)
A properly fitting air-purified (combination organic vapor and particulate) respirator, proven by test to be effective in isocyanate-containing spray paint environments and used in accordance with all recommendations made by the manufacturer, can be used when ALL of the following conditions are met:
-The airborne isocyanate concentrations are known to be below 0.05 ppm averaged over 8 hours (10 times the 8 hour TWA exposure limit) and
-the airborne polyisocyanate (polymeric, oligomeric) concentrations are known to be below 5 mg/m3 averaged over 8 hours or 10 mg/m3 averaged over 15 minutes (10 times the 8 hour TWA or the 15 minute STEL exposure limits) and
-a NIOSH-certified End of Service Life Indicator or a change schedule based upon objective information or data is used to ensure that cartridges are replaced before the end of their service life.
In addition, pre-filters should be changed whenever breathing resistance increases due to particulate buildup.

Medical surveillance:

All employees who are assigned to an isocyanate work area should undergo a pre-placement medical evaluation. A history of eczema or respiratory allergies (such as hay fever) are possible reasons for medical exclusion from isocyanate areas. Employees who have a history of adult asthma should be restricted from work with isocyanates. Employees with a history of prior isocyanate sensitization should be excluded from further work with isocyanates. A comprehensive annual medical surveillance program should be instituted for all employees who are potentially exposed to diisocyanates. Once a worker has been diagnosed as sensitized to any isocyanate, no further exposure can be permitted.

Environmental exposure controls:

Do not empty into drains.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:	Viscous liquid which forms an off-white to yellowish froth when released from the container. (Note: Appearance may different with the introduction of dye or colorant.)
Odor:	Slight, hydrocarbon-like odor during curing stage
Odor threshold:	No data available.
Molecular weight:	Not applicable.
Chemical formula:	Not applicable.
pH:	No data available.
Freezing/ melting point:	No data available.
Initial boiling point:	-33.3 to -11.7 °C (-28 to 11°F), propellant; 93.3 °C (200 °F), liquid phase
Evaporation rate:	Not established.
Flammability (solid, gas):	Not applicable.
Flash point:	-68.9 °C (-156 °F), estimated based on liquefied petroleum gas (hydrocarbon HC)
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Lower and upper explosive (flammable) limits:	Not established.
Vapor pressure in container:	Contents under pressure have a vapor pressure >50 psi (>345 kPa).
Vapor pressure of liquid:	Liquid phase vapor pressure: <1 mm Hg @ 40 °C
Vapor density:	No data available.
Specific gravity:	~1.1
Viscosity, dynamic:	No data available.
Solubility in water:	Insoluble - reacts slowly with water during cure to liberate carbon dioxide gas
Partition coefficient: noctanol/ water:	No data available.
Volatiles by Volume:	No data available.
Explosion Data:	Contents can be sensitive to mechanical impact or static discharge. Vapor released during and immediately after dispensing may ignite if proper ventilation is not employed and vapor buildup is allowed to occur. Extinguish or remove all sources of ignition during dispensing and until product becomes tack-free or skins over.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:	Stable under recommended storage and handling conditions. Do not store above 49 °C (120 °F). For longest shelf life, avoid storage above 32 °C (90 °F).
Chemical stability:	Stable under normal conditions of use and recommended storage conditions. Product is temperature sensitive.
Possibility of hazardous reactions:	Elevated temperatures can cause product to decompose, releasing carbon dioxide. Flammable propellant. Contents are under pressure and exposure to high temperatures can cause containers to rupture or explode.
Conditions to avoid:	Temperatures below 5 °C (40 °F) and above 35 °C (95 °F); incompatible materials; moisture.
Incompatible materials:	Alcohols, strong oxidizing agents, strong bases, amines, ammonia, alcohols, metal compounds.
Hazardous decomposition products:	Thermal decomposition products include carbon oxides, nitrogen oxides, hydrogen chloride, halogenated hydrocarbons, hydrogen cyanide, isocyanic acid, dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Oral Toxicity:	Expected to have low acute oral toxicity.
Acute inhalation toxicity:	Expected to have low acute inhalation toxicity.
Acute dermal toxicity:	Expected to have low acute dermal toxicity.
Skin irritation:	Causes skin irritation.
Eye irritation	Causes serious eye irritation.
Sensitization:	May cause skin and respiratory sensitization.
Genotoxicity:	Genetic toxicity data for MDI are inconclusive. Some in vitro studies yielded positive results, while other test data were negative.
Mutagenicity:	Test data using laboratory animals was predominately negative.
Specific organ toxicity - single exposure:	May cause respiratory irritation.

Specific organ toxicity - repeated exposure	May cause damage to the lungs, central nervous system and skin.
Aspiration hazard:	No data available.
Further information:	MDI and PMDI: IARC Group 3 carcinogen - Not classifiable as to its carcinogenicity to humans. Not listed as a carcinogen by ACGIH, OSHA or NTP. MDI/PMDI did not cause birth defects in laboratory animals; fetal effects occurred only at high doses which were toxic to the mother. Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/PMDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects. Chlorinated Paraffins (C14 - 16) may accumulate in body tissues and fluids rich in lipid content; therefore, this material may cause harm to breastfed children Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:	The aquatic toxicity of this product has not been experimentally determined. However, it may cause long lasting harmful effects to aquatic life.
Persistence and degradability:	Product is not readily biodegradable. In aquatic and terrestrial environments, this material reacts with water, forming predominantly insoluble and stable polyureas. In the atmospheric environment, this material is expected to have a short tropospheric half-life, based on data from similar diisocyanates.
Bioaccumulative potential:	Bioaccumulation potential is low.
Mobility:	Expected to have low mobility based on product's reactivity with water, which forms predominately insoluble polyureas.
Results of PBT and vPvB assessment:	No data available.
Other adverse effects:	Do not allow material to run into surface waters, wastewater or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Methods of disposal:	1. DO NOT INCINERATE CONTAINERS. 2. Before disposing containers, empty container by dispersing foam into a waste container such as a cardboard box or plastic bag. Relieve container of pressure after foam is exhausted. Always wear safety glasses or goggles, nitrile gloves and clothing that protects against dermal exposure. 3. Allow product to fully cure before disposing material. Never discard product in a liquid state. 4. DISPOSE OF EMPTY CONTAINERS ACCORDING OT APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CHECK WITH LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE. The generation of waste should be avoided or minimized whenever possible. Empty containers may retain some product residues; observe all precautions for product. This material and its container must be disposed of in a safe way. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff contact with soil and entry into waterways, drains and sewers.
Hazardous waste:	The classification of this product may meet the criteria for a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

US DOT (Domestic Ground Transportation)

Proper Shipping Name:	Aerosols, flammable (each not exceeding 1 liter) (Isobutane, Dimethyl Ether, Propane)
Hazard Class:	2.1
UN/NA:	UN1950
Packing Group:	-
NAERG:	Guide #126
Packaging Authorization:	Non-Bulk: None; Bulk: None
Packaging Exceptions:	49 CFR 173.203

IMO/IMDG (Water Transportation) Proper

Proper Shipping Name:	Aerosols, flammable (each not exceeding 1 liter) (Isobutane, Dimethyl Ether, Propane)
Hazard Class:	2.1
UN/NA:	UN1950
Packing Group:	-
Marine Pollutant:	No
EMS Number:	F-D, S-U

ICAO/IATA (Air Transportation)

Proper Shipping Name:	Aerosols, flammable (each not exceeding 1 liter) (Isobutane, Dimethyl Ether, Propane)
Hazard Class:	2.1
UN/NA:	UN1950
Packing Group:	-
Quantity Limitations:	49 CFR 173.27 and 175.75 - Cargo Aircraft Only: 150 kg; Passenger Aircraft: 75 kg

RID/ADR (Rail Transportation)

Proper Shipping Name:	Aerosols, flammable (each not exceeding 1 liter) (Isobutane, Dimethyl Ether, Propane)
Hazard Class:	2.1
UN/NA:	UN1950
Packing Group:	-

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for substance or mixture
U. S. Federal Regulations

OSHA Hazard Communication Standard:	This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories:	Acute Health Hazard, Chronic Health Hazard, Fire Hazard, Reactive Hazard, Sudden Release of Pressure Hazard.
SARA 313 Information:	4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8) and Diphenylmethane Diisocyanate, Isomers and Homologues, (CAS #9016-87-9) are subject to the reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986. Applicability must be determined by the end user.
SARA 302/304 Extremely Hazardous Substance:	No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.
SARA 302/304 Emergency Planning & Notification:	No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.
Comprehensive Response Compensation and Liability Act (CERCLA):	This product contains the following CERCLA reportable substances: 4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8), RQ - 2,268 kg (5,000 lbs).
Clean Air Act (CAA):	4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8) is listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 Ozone depletors. This product does not contain any Class 2 Ozone depletors.
Clean Water Act (CWA):	4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8) is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains trace amounts of substances known to the State of California to cause cancer or other reproductive harm.

Other U.S. State Inventories:

4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/ or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, NY, PA, WA, WI.
Polymeric MDI (CAS #9016-87-9) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: DE, NJ, MN.
Alkanes, C14 - C17, Chloro (CAS #85535-85-9) are listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): ME, MN.
Isobutane (CAS #75-28-5) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): DE, ME, MA, NJ, PA.
Dimethyl Ether (CAS #115-10-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/ Air Pollutants List(s): DE, ME, MA, MN, NJ, PA.
Propane (CAS #74-98-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants List(s): DE, MA. MN. NJ, PA, WA.

Canada

WHMIS Hazard Symbol and Classification:

A - Compressed Gas

B1 - Flammable Gas

D1A - Very toxic material causing immediate and serious toxic effects - Acute lethality
D2A - Very toxic material causing other toxic effects

D2B - Toxic material causing other toxic effects

Canadian Controlled Products Regulations (CPR):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the SDS contains all the information required by the Controlled Products Regulations.
Canadian Ingredient Disclosure List (IDL): 4,4'-Diphenylmethane Diisocyanate (CAS #101-68-8) is listed on the IDL.
Canadian National Pollutant Release Inventory (NPRI): MDI and PMDI are listed on the NPRI.

European Economic Community

Labeling (67/548/ EEC or 1999/45/EC)

F+ - Extremely flammable 

Xn - Harmful 

SAFETY DATA SHEET
GENERAL PURPOSE FOAM

Risk Phrases:

R12 - Extremely flammable.
R20 - Harmful by inhalation.
R36/37/38 - Irritating to eyes, respiratory system and skin.
R40 - Limited evidence of carcinogenic effect.
R42/43 - May cause sensitization by inhalation and skin contact.
R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation. R64 - May cause harm to breastfed babies.
53 - May cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S1/2 - Keep locked up and out of reach of children.
S9 - Keep container in a well-ventilated place.
S16 - Keep away from sources of ignition.
S23 - Do not breathe fumes, vapor or mist.
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label or this SDS where possible).

WGK, Germany (Water danger/ protection):

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Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada	Domestic Substance List (DSL).	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.
*"No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.

Chemical safety assessment:

For this product a chemical safety assessment was not carried out.

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SECTION 16. OTHER INFORMATION

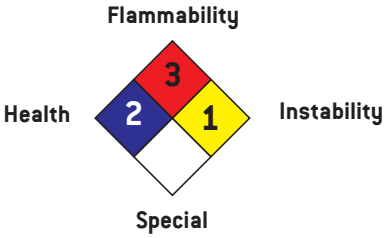
Hazardous Material Information System (HMIS)

Health	2
Flammability	3
Physical hazards	1
Personal Protection	H

HMIS & NFPA Hazard Rating Legend

* = Chronic Health Hazard
0 = Insignificant
1 = Slight
2 = Moderate
3 = High
4 = Extreme

National Fire Protection Association (NFPA)




Safety Glasses


Gloves


Protective Apron


Vapor Respirator

The information herein is given in good faith and is believed to be accurate and correct; however, no warranty, expressed or implied, is made. EverKem Diversified Products assumes no responsibility for personal injury or property damage that may arise from the use of this material since the conditions of handling and use are beyond our control. It is the responsibility of the user to comply with all Federal, State and local laws and regulations regarding use of this product. Vendees or users assume all risks associated with the use of this material.