

Section 1: IDENTIFICATION

GSH Product Identifier: Progressive Materials 4700 HFO
Other means of Identification: None

Relevant Identified uses of the substance or mixture and uses advised against

Product Use: Component of a Foam Insulation System

Area of Application: Industrial applications

Supplier/Manufacturer: Progressive Materials

540 Central Ct.

New Albany, IN 47150

Emergency Phone 1(800) 424-9300

Section 2: Hazard Identification**Classification of the substance or mixture:**

Skin Irritation - Category 2

Eye Irritation - Category 2A

Acute Toxicity (Inhalation) - Category 4

Specific target organ toxicity - repeated exposure - Oral Category 2

GHS label elements

Signal word: Warning

Pictogram:



Hazard Statements: Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause damage to organs (kidney) through prolonged or repeated exposure if swallowed.

Precautionary statements:

Prevention: Avoid breathing vapours/spray

Use in a well ventilated area

Wash thoroughly after handling

Wear protective gloves

Section 3: Composition/information on ingredients

Substance/mixture: Mixture

Other means of identification: Not available

Ingredient Name	Concentration	Cas #	Exposure Limits	LD50/LC50
Hydrofluro-carbon	7-13%	460-73-1	Not available	>20 000ppm 4hr (rat)/ Not available
2-Butoxyethanol	1-5%	111-76-2	Not available	1746 mg/kg (rat)/2.4mg/l, 4h (rat) inhalation

Section 4: FIRST AID MEASURES

Description of necessary first aid measures

Skin: Clean exposed area with soap and warm water. Continue to rinse for at least 10 minutes. Remove contaminated clothing. Wash clothes before reuse. Seek medical attention.

Eyes: Immediately flush thoroughly with water for at least 15 minutes lifting eye lids occasionally. Seek medical attention if irritation persists.

Inhalation: Remove victim to fresh air; give artificial respiration if not breathing. Seek medical attention.

Ingestion: Wash mouth out with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting. Seek medical attention immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Causes skin irritation with symptoms of reddening, itching, and swelling.

Causes serious eye irritation with symptoms of reddening, tearing, swelling, and burning.

Vapour can reduce oxygen available for breathing.

Over exposure signs/symptoms

Skin Contact: Not available

Eye Contact: Not available

Inhalation: Not available

Ingestion: Not available

Delayed and Immediate effects and also chronic effects from short and long term exposure

Short Term Exposure: Not available

Long Term Exposure: Not available

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician: Treat symptomatically.

Specific Treatments: None

Protection of first aiders: No action shall be taken involving any personal risk or without suitable training. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Section 5: FIRE FIGHTING MEASURES

Means of Extinction: Use extinguishing agent suitable for the surrounding fire. Suitable extinguishing media: Use dry chemical, Carbon Dioxide, water spray or alcohol resistant foam.

Specific hazards arising from the chemical: Carbon oxides, nitrogen oxides, dense black smoke. Burning produces irritant fumes.

Hazardous combustion products: May produce carbon dioxide, carbon monoxide, oxides of nitrogen. Dense black smoke. Other potentially toxic fumes.

Special protective equipment and precautions for fire-fighters:

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk without suitable training. Fire fighters should wear appropriate protective equipment and self contained breathing apparatus with a full face piece operated in positive pressure mode. Move undamaged containers from immediate hazard area if it can be done safely.

Section 6: ACCIDENTAL RELEASE MEASURES

Spill Procedure:

Clean up personnel must wear protective equipment to prevent contact with the product. Evacuate the area of all unnecessary personnel. Stop spill at source. Use inert absorbent material such as sand, clay, earth or floor absorbent to clean up spill. Shovel into drums.

Personal Precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Wear personal protection equipment. Remove persons to safety. Do not breathe vapours or spray mist.

Methods and material for containment and cleaning up:

Suitable material for taking up: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Wash with plenty of water.

Section 7: HANDLING AND STORAGE

Precautions for safe handling:

Put on appropriate personal protective equipment. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wear appropriate respirator. Keep in the original container and keep tightly closed when not in use.

Advice on general occupational hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands before, eating, drinking or smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities:

Store product in accordance with local regulation. Store product at room temperature away from heat and moisture. Store product in original container in a dry, cool, and well ventilated area with local exhaust. Keep away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONS**Appropriate Engineering Controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, etc) below recommended exposure limits. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. Do not breathe dust/fume/gas/mist/vapours.

Individual Protection Measures

Eye Protection: When directly handling liquid product, eye protection is required, such as chemical safety goggles or chemical safety goggles in combination with a full face shield when there is a greater risk of splash.

Protection for skin: Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact.

Protection for hands: Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling this product. For example, nitrile rubber, butyl rubber, neoprene and PVB

Respiratory Protection: Spraying increases the risk of hazardous exposure. In atmospheres where the material is sprayed, workers should avoid contact with aerosols through proper engineering controls such as exhaust ventilation and/or proper protective equipment such as a full face air supplied respirators.

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Colour: Amber Liquid	Vapour Pressure: Not available
Physical State: Liquid	Vapour Density: Not available
Odour: Amine Odour	Relative Density: Not available
Odour Threshold: Not available	Solubility in water: Slightly Soluble
pH: 8-10	Partition coefficient: Not available
Melting Point/Freezing Point: Not available	Auto Ignition Temp: Not applicable
Initial Boiling Point: Not available	Decomposition Temp: Not available
Flash Point: Not applicable	Viscosity: 800cps-1000cps (at 25°C)
Evaporation Rate: Not available	Specific Gravity: 1.21 g/cm3
Lower Flammable Limit: None	
Upper Flammable Limit: None	

Section 10: STABILITY AND REACTIVITY

Chemical Stability: This is a stable material at room temperature.

Possibility of Hazardous Reactions: Not available.

Conditions to avoid: High temperatures, open flames and sparks.

Incompatibility (Materials to avoid): Oxidizing agents.

Hazardous decomposition Products: Carbon Monoxide, carbon dioxide, oxides of nitrogen. Dense black smoke. Other potentially toxic fumes.

Section 11: TOXICOLOGICAL INFORMATION

No results of animal experiments with this mixture are available.

Information on toxicological effects

Acute Toxicity:

No information available

Irritation:

Skin Irritation: Causes skin irritation.

Eye Irritant: Causes eye irritation.

Sensitization:

Skin Sensitization: Repeated and/or prolonged contact may cause skin sensitization. There is limited evidence from animal studies that skin contact may play a role in respiratory sensitization.

Repeated dose toxicity:
No information available

Carcinogenicity:

The ingredients of this product are not classified by ACGIH, IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Mutagenicity:
No Information available

Toxicity to reproduction:
No Information available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Other adverse effects: Not available

Section 13: DISPOSAL CONSIDERATIONS

Disposal Procedure:

Comply with Federal, provincial, and local regulations on reporting releases.

Consult your local or regional authorities.

Section 14: TRANSPORT INFORMATION

TDG (TRANSPORTATION OF DANGEROUS GOODS) CLASSIFICATION: Not regulated

Class: Not regulated

Packing Group: Not regulated

Special Precautions: Not available

Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16: OTHER INFORMATION

DATE: October 2, 2023

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