



ULTRASEAL ® PF-600

SECTION 1. IDENTIFICATION

Product Identifier	ULTRASEAL ® PF-600
Other Means of Identification	"B" Component
Other Identification	Class 1, CCMC# 13529-L
Recommended Use	Polyurethane Foam System.
Restrictions on Use	None known.
Manufacturer	NUCO Inc., 150 Curtis Dr., Guelph, Ontario, N1K 1N5, Canada, (519) 823-4994, www.sealantcentre.com
Emergency Phone No.	Infotrac 24 Hour Emergency Tel, (800) 535-5053
Date of Preparation	January 26, 2017

SECTION 2. HAZARD IDENTIFICATION

Classification

Gas under pressure - Compressed gas; Skin irritation - Category 2; Eye irritation - Category 2A

Label Elements



Signal Word:
Warning

Hazard Statement(s):

Contains gas under pressure; may explode if heated.
Causes skin and eye irritation.

Precautionary Statement(s):

Prevention:

Wash hands and skin thoroughly after handling.
Wear eye protection/face protection.
Wear protective gloves.
Obtain special instructions before use.
Do not pierce or burn, even after use.

Response:

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IF ON SKIN: Wash with plenty of water.

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

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

Storage:

Protect from sunlight. Store in a well-ventilated place.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Other Hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Proprietary Polyol Blend	Proprietary	30.0-60.0		
Phosphoric acid, tris(2-chloro-1-methylethyl) ester	13674-84-5	15.0-45.0		
1,1,1,2-Tetrafluoroethane	811-97-2	10.0-30.0		
Diethylenetriamine, 1,1,4,7,7-pentamethyl-	3030-47-5	1.0-5.0		
Diethylene glycol	111-46-6	0.5-1.5		

Notes

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

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice or attention.

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Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get medical advice or attention if you feel unwell or are concerned.

First-aid Comments

If exposed or concerned, get medical advice or attention.

Most Important Symptoms and Effects, Acute and Delayed

If inhaled: can irritate the nose and throat. Symptoms may include coughing, shortness of breath, difficult breathing and tightness in the chest.

If on skin: may cause mild irritation.

If swallowed: symptoms may include nausea, vomiting, stomach cramps and diarrhea.

If in eyes: may cause moderate to severe irritation. Symptoms include sore, red eyes, and tearing.

Immediate Medical Attention and Special Treatment

Target Organs

Skin, eyes.

Special Instructions

Not applicable.

Medical Conditions Aggravated by Exposure

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Contains gas under pressure; may explode if heated. Heating increases the release of toxic vapour.

In a fire, the following hazardous materials may be generated:

carbon oxides; nitrous gases; very toxic polycyclic aromatic hydrocarbons.

Special Protective Equipment and Precautions for Fire-fighters

No special precautions are necessary.

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Remove or isolate incompatible materials as well as other hazardous materials. Increase ventilation to area or move leaking container to a well-ventilated and secure area.

Environmental Precautions

It is good practice to prevent releases into the environment. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas.

Methods and Materials for Containment and Cleaning Up

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Stop or reduce leak if safe to do so. Ventilate the area to prevent the gas from accumulating, especially in confined spaces. Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.

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Other Information

Report spills to local health, safety and environmental authorities, as required. Contact supplier, local fire and emergency services for help.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Prevent uncontrolled release of product.

Conditions for Safe Storage

Store in an area that is: cool, temperature-controlled, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources, separate from incompatible materials (see Section 10: Stability and Reactivity).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Phosphoric acid, tris(2-chloro-1-methylethyl) ester	Not established	Not established	Not established	Not established	Not established	Not established
Diethylene glycol	Not established	Not established	Not established	Not established	10 mg/m ³	Not established
1,1,1,2-Tetrafluoroethane	Not established	Not established	Not established	Not established	1000 ppm	Not established
Diethylenetriamine, 1,1,4,7,7-pentamethyl-	Not established	Not established	Not established	Not established	Not established	Not established

Appropriate Engineering Controls

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.
Suitable materials are: nitrile rubber, neoprene rubber, Silver Shield®.

Respiratory Protection

Wear a NIOSH approved particulate respirator equipped with an N95, R95, or P95 filter.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Dark amber oily liquid. Turns milky yellow on exposure to air.
Odour	Fishy
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	Not available (melting); Not available (freezing)
Initial Boiling Point/Range	-26 °C (1,1,1,2-Tetrafluoroethane)
Flash Point	> 200 °C (estimated)
Evaporation Rate	Not available
Flammability (solid, gas)	Not applicable

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Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	> 345 kPa
Vapour Density (air = 1)	Not available
Relative Density (water = 1)	1.20 at 25 °C (77 °F)
Solubility	Slightly soluble in water; Not available (in other liquids)
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available (kinematic); Not available (dynamic)
Other Information	
Physical State	Liquid
Volatile Organic Content	25 g/L (calculated minus exempt compounds and water)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

High temperatures. Incompatible materials. Temperatures below 16 °C and above 32 °C

Incompatible Materials

Reacts violently with: alcohols (e.g. ethanol), strong bases (e.g. sodium hydroxide), amines (e.g. triethylamine), metals (e.g. aluminum), ammonia, strong oxidizing agents (e.g. perchloric acid), water.

Not corrosive to metals.

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive, oxidizing nitrogen oxides; extremely hazardous hydrogen cyanide; corrosive hydrogen fluoride.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

Likely Routes of Exposure

Inhalation.
Skin contact.
Skin absorption.
Eye contact.
Ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Phosphoric acid, tris(2-chloro-1-methylethyl) ester		630-2000 mg/kg (rat)	> 5000 mg/kg (rabbit)
Diethylene glycol	> 4600 mg/m ³ (rat) (4-hour exposure)	13311 mg/kg (rat)	13300 mg/kg (rabbit)

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1,1,1,2-Tetrafluoroethane	500000 ppm (rat) (4-hour exposure)		
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Skin Corrosion/Irritation

May cause mild irritation based on information for closely related chemicals.

Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Skin Absorption

No information was located.

Ingestion

No information was located.

Aspiration Hazard

No information was located.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

No information was located.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
Phosphoric acid, tris(2-chloro-1-methylethyl) ester	Not Listed	Not designated	Not Listed	Not Listed
Diethylene glycol	Not Listed	Not designated	Not Listed	Not Listed
1,1,1,2-Tetrafluoroethane	Not Listed	Not designated	Not Listed	Not Listed
Diethylenetriamine, 1,1,4,7,7-pentamethyl-	Not Listed	Not designated	Not Listed	Not Listed

Not known to cause cancer.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Environmental information was not located.

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations. Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. This product and its container must be disposed of as hazardous waste. Do NOT dump into any sewers, on the ground or into any body of water. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	1956	Compressed Gas (Fluorinated hydrocarbon, Nitrogen)	2.2	III
US DOT	1956	Compressed Gas (Fluorinated hydrocarbon, Nitrogen)	2.2	III
IATA (Air)	1956	Compressed Gas (Fluorinated hydrocarbon, Nitrogen)	2.2	III
IMO (Marine)	1956	Compressed Gas (Fluorinated hydrocarbon, Nitrogen)	2.2	III

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION**Safety, Health and Environmental Regulations**

None known.

Canada**Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL or are not required to be listed.

USA**Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.

Additional USA Regulatory Lists

California Proposition 65:

This product contains trace amounts of components known to the State of California to cause cancer, birth defects, or other reproductive harm.

CERCLA:

None of the chemicals in this product are contained in levels that exceed the threshold reporting levels established

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by CERCLA.

Clean Air Act (CAA):

This product does not contain any substances listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112(b).

This product does not contain any Class 1 and Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

US State Inventories:

1,1,1,2-Tetrafluoroethane (CAS #811-97-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: ME, WI.

Diethylene Glycol (CAS# 111-46-6) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists, and/or Air Quality/ Air Pollutants lists: MN, PA.

SARA Title III - Section 302: Not applicable.

SARA Title III - Section 311/312:

Acute Health Hazard

Sudden Release of Pressure Hazard.

SARA Title III - Section 313: Not applicable.

SECTION 16. OTHER INFORMATION

NFPA Rating	Health - 2	Flammability - 1	Instability - 1
SDS Prepared By	Technical Services Department		
Phone No.	(519) 823-4994		
Date of Preparation	January 26, 2017		
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References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS).		
Disclaimer	The information herein is given in good faith, but no warranty, express or implied, is made. Product users should make independent judgements of the suitability of this information to ensure proper use and to protect the health and safety of employees.		

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