SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name:
AFT Two-Part Foam Sealant

Product ID numbers: AFT-16, AFT-16P4, AFT-16P4X
AFT-16XXX (Where XXX is the package or kit code)

1.2 Relevant identified uses of the mixture and uses advised against

Identified uses: Sealant, duct block; two-part material, aerosol package

List of advices against: Not applicable.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:

American Polywater Corporation
11222 - 60th Street North
Stillwater, MN 55082 USA
Tel: 1-651-430-2270
Email: sds@polywater.com

1.4 Emergency telephone numbers

INFOTRAC: 1-800-535-5053 (USA) 1-352-323-3500

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to USA OSHA 29 CFR 1910.1200 (2012) and Canada HPR (SOR/2015-17; WHMIS 2015).

Flam Aerosol 1; H222, H229
Skin Irritation, Cat 2; H315
Eye Irritation, Cat 2A; H319
Acute Tox, Cat 4; H332
Respiratory Sensitization, Cat 1; H334
Skin Sensitization, Cat 1; H317
Target Organ Toxicity (single exposure), Cat 3; H335
Target Organ Toxicity (repeated exposure), Cat 2; H373

2.2 Label elements

Contains: Diphenylmethanediisocyanate, isomers and homologues

Pictograms:

Signal word: Danger

Hazard Statements:

H222	Extremely flammable aerosol.
H229	Pressurized container: may burst 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.
H373	May cause damage to organs through prolonged or repeated inhalative exposure.

Precautionary Statements:

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe fumes.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing and eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311	If experiencing respiratory symptoms: Call a poison center or doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F
P501	Dispose of contents/container in accordance with local and national regulations.

Notes: 4,4'-methylenediphenyl diisocyanate (MDI, precursor to the polymeric form) has not been designated as a carcinogen by IARC, NTP, ACGIH, OSHA, or the EPA. There are inadequate human carcinogenicity data, and only limited animal data. Additionally, the IARC Working Group noted that tumorigenic effects observed in animals may be attributed to non-specific particle effect (IARC monograph 71). We have not classified substance as a carcinogen but recommend that users avoid inhalation of vapor above exposure limits.

2.3 Other hazards: No information available.

3. Composition/Information on Ingredients

Component	CAS #	Wt. %
Polymeric diphenylmethane diisocyanate	9016-87-9	25 - <50
2-propanol, 1-chloro-, Phosphate (3:1)	13674-84-5	10 - <25
Diethylmethylbenzenediamine	68479-98-1	0.1 - <1
Methanaminium N,N,N-trimethyl-,salt with 2,2-dimethylpropanoic acid	478-310-4	0.1 - <1
1,1-Difluoroethane (HFC 152a)	75-37-6	

This product contains no other reportable, hazardous components under 29 CFR1910 or Canada HPR (SOR/2015-17); WHMIS 2015. No additional ingredients require reporting based on applicable concentration and current supplier knowledge.

4. First Aid Measures

4.1 Description of first aid measures

Eye Contact: Immediately flush eyes with large quantity of water for 15 minutes. Seek medical attention.

Skin Contact: Remove contaminated clothing; flush skin thoroughly with soap and water. If irritation occurs, seek medical attention.

Inhalation (Breathing): If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention.

Ingestion (Swallowing): If swallowed, rinse mouth and drink plenty of water. Do not induce vomiting. If patient is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person. Do not leave victim unattended. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic skin and respiratory reaction. Refer to Section 11 for more information.

4.3 Indication of immediate medical attention and special treatment needed.

No information available.

5. Firefighting Measures

5.1 Extinguishing media:

Water Fog, Carbon Dioxide, Dry Chemical or Foam.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition and by-products:

Carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors.

5.3 Advice for firefighters

Wear full protective clothing, including self-contained, positive pressure or pressure-demand breathing apparatus. Sealed container can build up pressure when exposed to high heat. Use water spray to cool fire exposed containers. Aerosol cans can build up pressure and explode when exposed to temperatures greater than 122°F (50°C).

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Provide adequate ventilation. Remove all sources of ignition. Avoid contact with skin, eyes and clothes. Do not breathe vapor/aerosol.

6.2 Environmental precautions:

Prevent from entering waterways.

6.3 Methods materials for containment and cleaning up:

Spills expected to be small quantities. Collect excess material with absorbents or wipe with dry towels. Wash with a dilute ammonia solution.

6.4 Reference to other sections:

Refer to Sections 4, 5, 8, and 13 for more information.

7. Handling and Storage

7.1 Precautions for safe handling

Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Wash thoroughly after handling. Wash contaminated clothing before reuse. For industrial or professional use only.

7.2 Conditions for safe storage, including incompatibilities

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Keep in a cool, well-ventilated place. Protect from freezing. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

7.3 Specific end uses

See technical data sheet on this product for further information.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Exposure limits and recommendations:

Polymeric diphenylmethane diisocyanate:

ACGIH, OSHA and NIOSH have not established any OELs

Country/Source	Long-term exposure limit 8 hr. OEL, TWA	Short-term exposure limit – 15 min (ceiling)
Canada (Alberta)	0.005 ppm	--
Germany – AGS, DFG	0.05 mg/ m^3	0.05 mg/ m^3

All isocyanates as NCO:

Country/Source	Long-term exposure limit 8 hr. OEL, TWA	Short-term exposure limit – 15 min (ceiling)
U.K. EH 40 WEL	0.02 mg/ m^3	0.07 mg/ m^3
Ireland	0.02 mg/ m^3	0.07 mg/ m^3
Australia OEL	0.02 mg/m^3	0.07 mg/m^3

2-propanol, 1-chloro-, Phosphate (3:1):

ACGIH, OSHA and NIOSH have not established any OELs

Biological Limit Values (BLV): None established for this material or its components

8.2 Exposure controls

Respiratory protection:

Use with adequate ventilation to keep vapor concentration below acceptable limits. Observe OSHA standard 29 CFR 1910-94, 1910.107, 1910.108. Ventilation is not required for most uses. If product is used in a way that ventilation is not adequate, use approved chemical/mechanical filters designed to remove a combination of particulate and organic vapors in open and restricted areas. Use approved airline type respirators or hoods in confined areas. Observe OSHA standard 29 CFR 1910.134.

Protective gloves:

Gloves made from Nitrile rubber (Material thickness >0.1 mm for short time contact) are recommended. Gloves should be replaced after each short time contact or contamination. In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374. Material thickness > 0,4 mm Perforation time > 480 minutes.

Eye protection:

Goggles which can be tightly sealed or safety glasses with side shields.

Other protective equipment:

Wear suitable protective clothing. Chemical resistant clothing made from nitrile rubber impregnated fabric is recommended. Remove and wash contaminated clothing before reuse. Discard contaminated shoes. Use protective cream if skin contact is likely.

9. Physical and Chemical

9.1 Information of basic physical and chemical properties

Appearance:	Purple liquid, aerosol presentation.
Odor threshold:	Faint, aromatic odor
pH:	Not available
Freezing point:	Not available
Boiling point:	Not available
Flash point:	Not available
Evaporation rate:	Not available

Flammability (solid, gas):	Does not apply
Upper/lower flammability or explosive limits:	**LEL:** 4.32 vol % **UEL:** 17.35 vol%
Vapor pressure:	Not available
Vapor density (Air = 1):	Not available
Specific gravity (H_2O = 1):	Not available
Solubility in water:	Practically insoluble
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

9.2 Other Information

VOC Content: 0 g/L (contains exempt propellant)

10. Stability and Reactivity

10.1 Reactivity:

Reacts with water, reacts with substances which contain active hydrogen.

10.2 Chemical stability:

Stable

10.3 Possibility of hazardous reactions:

Hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid:

Keep away from heat/sparks/open flames/hot surfaces – No smoking. Avoid freezing, high temperatures, flame, high humidity and water contamination.

10.5 Incompatible materials:

Water, alcohols, amines, acids, alkalis, metal compounds.

10.6 Hazardous decomposition products:

Carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors.

11. Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity

Eye contact:

Direct eye contact with material or vapors may cause eye irritation.

Skin contact:

Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material. Allergic skin reaction symptoms include redness, swelling, blistering and itching.

Irritation and Sensitization Potential:

Product may be irritating to skin and eyes.

Inhalation (Breathing):

Material has low vapor pressure and inhalation hazard is expected to be minimal. Vapor exposure may cause irritation of the nose and throat. Symptoms may include burning sensation, coughing and shortness of breath, or other signs of respiratory distress. May cause allergic respiratory reaction below exposure guideline in susceptible individuals.

Ingestion:

Ingestion may cause irritation of the gastrointestinal tract.

Toxicity to Animals:

Diphenylmethanediisocyanate (MDI) Isomers and homologues (9016-87-9):

Acute oral toxicity	LD_{50} (rat) > 10000 mg/kg
Acute dermal toxicity	LD_{50} (rabbit) > 10000 mg/kg
Acute inhalation toxicity	ATE 1.5 mg/L

2-propanol, 1-chloro-, Phosphate (3:1) (13674-84-5)

Acute oral toxicity	LD_{50} (rat) 1,500 mg/kg
Acute dermal toxicity	LD_{50} (rabbit) 1,230 mg/kg
Acute inhalation toxicity	LC_{50} (rat) 5 mg/m^3, 4 hours

Aspiration Hazard:

No aspiration hazard expected.

Chronic Exposure:

Reproductive Toxicity:	Not available.
Mutagenicity:	Not available.
Teratogenicity:	Not available.
Specific Target Organ Toxicity (STOT)	Contains material which causes damage to the upper respiratory tract.
Toxicologically Synergistic Products:	Not available.
Carcinogenic Status:	This substance contains components identified as IARC Category 3, not classifiable. 4,4'-methylenediphenyl diisocyanate (MDI, precursor to the polymeric form) has not been designated as a carcinogen by IARC, NTP, ACGIH, OSHA, or the EPA. There are inadequate human carcinogenicity data, and only limited animal data. Additionally, the IARC Working Group noted that tumorigenic effects observed in animals may be attributed to non-specific particle effect (IARC monograph 71). We have not classified substance as a carcinogen but recommend that users avoid inhalation of vapor above exposure limits.

Respiratory/Skin Sensitization

May cause sensitization by inhalation and skin contact.

12. Ecological Information

12.1 Toxicity:	
Aquatic Toxicity:	No data available on mixture.
12.2 Persistence and degradability:	No data available on mixture.
12.3 Bioaccumulation potential:	Accumulation in organisms is not to be expected.
12.4 Mobility in soil:	Adsorption to solid soil phase is not expected
12.5 Results of PBT and vPvB Assessment:	This product is not, nor does it contain a substance that is a PBT or vPvB.
12.6 Other adverse effects:	None known.

This mixture is not considered dangerous to the environment.

13. Disposal Considerations

Dispose of product in accordance with National and Local Regulations.

14. Transport Information

UN Number:	1950
UN Proper shipping name:	AEROSOLS, Flammable, less than 1 liter each, Class 2.1, LTD QTY
Transport hazard class(es):	Class 2.1

Packing group:	Not Applicable
Environmental hazards:	None known
Special precautions:	None known
TDG:	Not Regulated
ICAO/IATA-DGR:	Consumer Commodity, ID 8000, Class 9, LTD QTY, Per S.P. A112
IMDG:	UN 1950, AEROSOLS, Flammable, less than 1 liter each, Class 2.1, LTD QTY

15. Regulatory Information

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

USA Federal and State
All components are listed on the TSCA inventory.

Hazard Categories for SARA Section 311/312 Reporting	**Acute**	**Chronic**	**Fire**	**Pressure**	**Reactive**
	Yes	Yes	Yes	No	No

	CERCLA/SARA Sec 302		**SARA Sec. 313**
Components	**Hazardous Substance RQ**	**EHS TPQ**	**Toxic Release**
Polymeric diphenylmethane diisocyanate	No	No	Yes (1%)

California Proposition 65:
WARNING: This product can expose you to ethylene glycol which is known to the State of California to cause birth defects and/or other reproductive harm. For more information, go to www.p65warnings.ca.gov.

Canada
All components are listed on the DSL inventory.
This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

15.2 Chemical Safety Assessment
No chemical safety assessment has been carried out for the mixture by the supplier.

16. Other Information

NFPA Ratings:	Health:	3
	Fire:	3
	Reactivity:	0

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel during spill, fire or similar emergencies. Hazard ratings are based on physical and toxic properties of combustion or decomposition.

Abbreviations and acronyms:
OSHA = Occupational Safety and Health Administration
STOT = Specific Target Organ Toxicity
LD_{50} = Median Lethal Dose
DNEL = Derived No Effect Level
ACGIH = American Conference of Governmental Industrial Hygienists
TSCA = Toxic Substances Control Act (USA)
DSL = Domestic Substances List (Canada)

Revision Date:	May 31, 2023
Revision Number:	**8**
Supersedes:	February 25, 2022
Other:	Not Applicable
Indication of Changes:	Section 14 updated Transport information. Written in accordance with the provisions of OSHA 1910.1200 App D (2012) and Canada HPR (SOR/2015-17) (WHMIS 2015). (GHS format)

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.