



Pro Form Products Ltd.
604 McGeachie Drive
Milton, Ontario, L9T 3Y5
Canada
905-878-4990

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)

SECTION 01: IDENTIFICATION

Initial supplier identifier..... Pro Form Products Ltd.
604 McGeachie Drive
Milton, Ontario L9T3Y5
Tel (905) 878-4990 Fax (905) 878-1189

Product identifier..... PFUS17102 EPOXY PANEL BONDER (30MIN)

Recommended use and restrictions on .. Adhesive applications.
use

Chemical family..... Mixture.

NFPA rating..... Part A: Health: 3 Fire: 1 Reactivity: 0. Part B: Health: 2 Fire: 1 Reactivity: 0.

HMIS..... Part A: H: 3 F: 1 R: 0. Part B: H: 2 F: 1 R: 0.

24 hour emergency number..... For transportation emergencies (in Canada) call CANUTEC 1-888-226-8832 (CAN-UTEC);
IN THE UNITED STATES CALL CHEMTREC 1-800-424-9300.
** For medical emergencies contact your local poison control centre **.

SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER.

Hazard Classification..... Skin Corrosion — Category 1. Skin Sensitizer — Category 1. Serious Eye Damage — Category 1. Germ Cell Mutagenicity 2. Carcinogenicity — Category 1. Reproductive Toxicity — Category 1. Specific Target Organ Toxicity — Repeated Exposure — Category 2. (Skin). (central nervous system). (Liver, Kidney).

Hazard Description..... H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 This product contains ingredients that may cause cancer. H360 May damage fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. (Skin). (central nervous system). (Liver, Kidney).

Prevention..... P201 Obtain special instructions before use. P202 Do not handle this product until all safety instructions have been read and understood. P260 Do not breathe mist, vapours, or spray. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves and eye protection.

Response P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower. P305 + P351 + P338 If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing until medical help arrives. P302 + P352 - If on skin: wash with plenty of water. P362 + P364 - Take off contaminated clothing and wash before reuse. P333 + P313 If skin irritation or rash occurs, get medical advice/attention. P308 + P313 If exposed or concerned, get medical advice/attention. P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P314 - Get medical advice/attention if you feel unwell. P301 + P330 + P331 If Swallowed: Rinse mouth. Do NOT induce vomiting. P310 - Immediately call your local poison control centre.

Storage..... P405 Store locked up.

Disposal..... P501 Dispose all unused, waste or empty containers in accordance with local regulations.
Note

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
PART A:		
POLYMER	254504001-6266	30-40
<<The actual concentration(s) withheld as a trade secret>>		
Silica, vitreous	60676-86-0	24

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)**SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS**

Triethylenetetramine	112-24-3	6.4
Phenol	108-95-2	5.44
2,4,6-Tris(Dimethylaminomethyl) Phenol	90-72-2	4.5
1,5-Pentanediamine, 2-methyl-	15520-10-2	2.4
1H-Imidazole	288-32-4	2
Cristobalite (SiO ₂)	14464-46-1	0.216
PART B:		
POLYMER	800986-5211P	60-70
POLYMER	254504001-6268	1.5-5
<<The actual concentration(s) withheld as a trade secret>> ..		
Bisphenol A Diglycidyl Ether	25085-99-8	9.75
Silica, vitreous (2)	60676-86-0	5
3-(Trimethoxysilyl) Propyl Glycidil	2530-83-8	2
Alkyl glycidyl ether	68609-97-2	2

SECTION 04: FIRST-AID MEASURES

Eye contact.....	Check for and remove any contact lenses, if safe and easy to do so. Immediately flush eyes with running water for a minimum of 30 minutes preferably up to 60 minutes. Get medical attention immediately.
Skin contact.....	Remove all contaminated clothing and immediately wash the exposed areas with copious amounts of water for a minimum of 30 minutes or up to 60 minutes for critical body areas. Obtain medical attention immediately. Wash clothing before reuse. Do not peel solidified product off the skin.
Inhalation.....	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion.....	If ingestion is suspected, contact physician or poison control center immediately. Do not induce vomiting. Phenol concentrations greater than 1.5% produce irritation and greater than 5% are corrosive; vomiting can cause further damage to the mouth and throat. Vomiting and diarrhea may occur spontaneously. If spontaneous vomiting occurs have victim lean forward with head down to prevent aspiration of fluid into the lungs. Do not dilute the swallowed material, since this may enhance its absorption. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, whether acute or delayed	Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Harmful by inhalation. High vapour concentrations may be irritating to the respiratory tract. May cause breathing difficulty. Can cause skin sensitization. Causes damage to organs through prolonged or repeated exposure. May cause cancer. May damage fertility or the unborn child.
Additional information.....	Treat victims symptomatically. In the event of an incident involving this product ensure that medical authorities are provided a copy of this safety data sheet. Phenol adsorbs to activated charcoal, and it maybe preferable to ipecac-induced emesis. Monitor for seizures, metabolic acidosis and ventricular dysrhythmias. Pulmonary edema may be delayed. Skin: this compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media	Use extinguishing media that is applicable to surrounding fire. Water spray. Foam. Carbon dioxide. Dry chemical. Do not use water in a jet.
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products	Acid vapours, ammonia, carbon dioxide and carbon monoxide, carboxylic acids, formaldehyde, hydrogen, hydrogen cyanide (hydrocyanic acid), methanol, nitrogen oxides (NO _x), phenols, silicon dioxide, silicone polymers, various hydrocarbons. By fire: protect against potentially toxic and irritating fumes. Do not allow run-off from fire fighting to enter drains or water courses.
Special protective equipment and precautions for fire-fighters	Firefighter should be equipped with self-contained breathing apparatus and full protective clothing to protect against potentially toxic and irritating fumes. Do not spray fire directly. A solid stream of water directed into the hot burning liquid could cause frothing. DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid. Cool containers with water spray.

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)**SECTION 06: ACCIDENTAL RELEASE MEASURES**

Leak/spill.....	Ventilate. Eliminate all sources of ignition. Evacuate all non-essential personnel. Contain the spill. Avoid all personal contact. Prevent runoff into drains, sewers, and other waterways. Absorb with earth, sand, or another dry inert material. Shovel into suitable unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution: mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%); or water (90%), concentrated ammonia (3-8%) and detergent (2%). Spilled material and water rinses are classified as chemical waste, and must be disposed of in accordance with current local, provincial, state, and federal regulations. Use a heat gun and a scraper to remove cured adhesive. Prior to using a heat gun, ensure that the surface can withstand the heat generated by the gun.
Personal precautions, protective equipment and emergency procedures	Isolate area and keep unauthorized people away. Do not walk through spilled material. Wear recommended protective equipment. Ventilate. Open windows and doors to allow air circulation. Dike area to prevent spreading. The use of absorbent socks or spill pillows may be required. Stop leak if safe to do so. Prevent runoff into drains, sewers, and other waterways.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....	Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Avoid breathing vapours or mist. Handle and open container with care. Containers of this material may be hazardous when empty. Since emptied containers retain product residues (vapour, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Employees should wash hands and face before eating or drinking.
Note Conditions for safe storage, including any incompatibilities	Store in a cool, dry and well ventilated area. Keep container closed when not in use. Empty containers retain hazardous product residues, both liquid and vapor.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
POLYMER	Not established	Not established	Not established	Not established	Not established	Not established
Silica, vitreous	0.1 mg/m ³	Not Established	0.1 mg/m ³ (dust)	Not Established	0.05 mg/m ³ (dust)	
Triethylenetetramine	5 ppm	Not Established	5 ppm	Not Established	19 mg/m ³ (REL)	
Phenol	19 mg/m ³	Not established	19 mg/m ³	Not established	5 ppm	
2,4,6-Tris(Dimethylamino methyl) Phenol	Not established	Not established	Not established	Not established	Not established	Not established
1,5-Pentanediamine, 2-methyl-	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established
1H-Imidazole	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established
Cristobalite (SiO ₂)	0.025 mg/m ³	Not Established	0.05 mg/m ³	Not Established	0.05 mg/m ³	
POLYMER	Not established	Not established	Not established	Not established	Not established	Not established
POLYMER	Not established	Not established	Not established	Not established	Not established	Not established
Bisphenol A Diglycidyl Ether	Not established	Not established	Not established	Not established	Not established	Not established
Silica, vitreous (2)	0.1 mg/m ³	Not Established	0.1 mg/m ³ (dust)	Not Established	0.05 mg/m ³ (dust)	
3-(Trimethoxysilyl) Propyl Glycidil	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established
Alkyl glycidyl ether	Not Established	Not Established	Not Established	Not Established	Not Established	Not Established
Appropriate engineering controls.....	Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits. Local mechanical exhaust ventilation should be used at sources of air contamination, such as open process equipment, or during purging operations, to capture gases and fumes that may be emitted. Standard reference sources regarding industrial ventilation (ie. ACGIH industrial ventilation) should be consulted for guidance about adequate ventilation.					
Personal Protective Equipment Respiratory/type.....	Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits. A NIOSH-approved air-purifying respirator with an					

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)**SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

Respiratory/type.....	appropriate cartridge and/or filter may be permissible in such instances. Protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.
Eye/type.....	Chemical safety goggles should be worn. Plastic face shields should be worn in addition to safety goggles for complete face protection.
Gloves/ type.....	Wear skin protection equipment. The selection of skin protection equipment depends on the nature of the work to be performed.
Clothing/type.....	Wear adequate protective clothes.
Footwear/type.....	Safety boots per local regulations.
Other/type.....	Emergency showers and eye wash stations should be available. Employees should wash their hands and face before eating, drinking, or using tobacco products.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state.....	Part A: Liquid.	Part B: Liquid.
Colour.....	Part A: Tan.	Part B: Black.
Odour.....	No data.	
Odour threshold (ppm).....	Not available.	
pH.....	No data.	
Melting / Freezing point (deg C).....	Not available.	
Initial boiling point / boiling range (deg C).....	No data.	
Flash point (deg C), method.....	Part A: >100°C, >212°F.	Part B: > 100.
Evaporation rate.....	Not available.	
Flammability (solids and gases).....	Not applicable.	
Upper explosive limit (% vol).....	No data.	
Lower explosive limit (% vol).....	No data.	
Vapour pressure (mm Hg).....	Not available.	
Vapour density (air=1).....	No data.	
Relative Density (Specific Gravity).....	Part A: 1.0 g/cm3 @ 23 C.	Part B: 1.1 g/cm3 @ 23 C.
Solubility.....	No data.	
Partition coefficient — n-octanol/water.....	Not available.	
Auto ignition temperature (deg C).....	No data.	
Decomposition temperature.....	Not available.	
Viscosity.....	Not available.	
VOC (less water).....	2.55 lb/USG - 305.57 g/L.	

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Product is stable; hazardous polymerization will not occur.
Chemical stability.....	Stable at normal temperatures and pressures.
Possibility of hazardous reactions.....	Will not occur under normal temperature and pressure.
Conditions to avoid, including static	Keep away from heat. Air. Moisture.
discharge, shock or vibration	
Incompatible materials.....	1,3-butadiene, acids, acrylates, alcohols, aldehydes, aluminum, amines, bases, brass, bronze, copper, copper alloys, fluorides, halogenated hydrocarbons, halogens, iron, ketones, lead, magnesium, nickel, nitrates, organic absorbents such as sawdust, peat moss, ground corn cobs, etc., oxidizing agents, peroxides, reducing agents, strong alkalis, water, zinc, peroxides.
Hazardous decomposition products.....	See hazardous combustion products section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
POLYMER	Not determined	Not determined
Silica, vitreous	No Data	No Data
Triethylenetetramine	No Data	2,500 mg/kg rat oral 805 mg/kg rabbit dermal
Phenol	No data	414 mg/kg (oral, rat)
2,4,6-Tris(Dimethylaminomethyl) Phenol	>0.5 mg/L 1Hr Inhalation, Rat	1200 mg/kg oral rat 1280 mg/kg dermal rabbit
1,5-Pentanediamine, 2-methyl-	4.9 mg/L	1,690 mg/kg oral rat
1H-Imidazole	No Data	970 mg/kg oral rat

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
Cristobalite (SiO ₂)	No Data	8030 mg/kg oral, rat 4248 mg/kg dermal, rabbit
POLYMER	Not determined	Not determined
POLYMER	Not determined	Not determined
Bisphenol A Diglycidyl Ether	>20.0 mg/l	> 2000 mg/kg (oral)
Silica, vitreous (2)	No Data	No Data
3-(Trimethoxysilyl) Propyl Glycidil	>5.3 mg/L	8,025 mg/kg (oral rat) 4,250 mg/kg (dermal rabbit)
Alkyl glycidyl ether	Not determined	26,800 mg/kg (oral rat)
Route of exposure.....	Skin contact. Eye contact. Inhalation. Ingestion.	
Effects of acute exposure.....	Hazardous in contact with skin, by ingestion, and by inhalation. Product is corrosive to the eyes and skin, causing skin burns and eye damage. May cause burns and permanent injury. Breathing of high vapour concentrations may cause anesthetic effects and serious health effects. The aromatic hydrocarbon solvents in this product can be irritating to the eyes, nose and throat. In high concentration, they may cause central nervous system depression and narcosis characterized by nausea, lightheadedness and dizziness from overexposure by inhalation.	
Effects of chronic exposure.....	Prolonged or repeated exposure may lead to allergic skin reactions. Prolonged or repeated exposure may result in an allergic respiratory reaction in sensitive individuals. May cause damage to the respiratory system, lungs, eyes, skin and central nervous system. Prolonged or repeated exposure may lead to kidney or central nervous system symptoms. This product contains crystalline silica. Excessive long-term exposure to crystalline silica may cause silicosis, a form of disabling, progressive and sometimes fatal fibrotic lung disease. Severe and permanent lung damage may result. Prolonged overexposure to crystalline silica (quartz) dust can cause fibrotic lung damage.	
Carcinogenicity of material.....	IARC Evaluation: The agent (the mixture) is carcinogenic to humans (group 1). . (Silica, vitreous). (Cristobalite (SiO ₂)). IARC has classified Carbon Black as "Group 2B", possibly carcinogenic to humans, based on laboratory animal inhalation studies. (in product at < 0.1%).	
Reproductive effects.....	Clear evidence of adverse effects on development, based on animal experiments. (Imidazol). Genotoxicity (in vitro): Positive. (Epoxy resin). (Bisphenol A Diglycidyl Ether). (Triethylenetetramine). (Phenol).	
Sensitizing capability of material.....	May cause sensitization by skin contact.	
Specific Target Organ Toxicity	Causes damage to organs through prolonged or repeated exposure . (Skin, Nervous system, Liver, Kidney).	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity.....	H401 Toxic to aquatic life. . H412 Harmful to aquatic life with long lasting effects.
Persistence and degradability.....	Not readily biodegradable.
Bioaccumulative potential.....	Product data not available.
Mobility in soil.....	Not available.
Other adverse effects.....	Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

Information on safe handling for disposal and methods of disposal, including any contaminated packaging . Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations. Empty containers must be handled with care due to product residue.

SECTION 14: TRANSPORT INFORMATION

TDG Classification.....	UN2735 - AMINES, LIQUID, CORROSIVE, N.O.S.(Triethylenetetramine) - Class 8 - PGIII. This product meets the Limited Quantity exemption when packaged in containers less than 5 liters.
DOT Classification (Road).....	UN2735 - AMINES, LIQUID, CORROSIVE, N.O.S.(Triethylenetetramine) - Class 8 - PGIII. This product meets the Limited Quantity exemption when packaged in containers less than 5 liters.
IATA Classification (Air).....	UN2735 - AMINES, LIQUID, CORROSIVE, N.O.S.(Triethylenetetramine) - Class 8 - PGIII. Limited Quantity. Do not ship by air without checking appropriate IATA regulations.
IMDG Classification (Marine).....	UN2735 - AMINES, LIQUID, CORROSIVE, N.O.S.(Triethylenetetramine) - Class 8 - PGIII. . EmS F-A, S-B. Limited Quantity. Check IMDG regulations for limited quantity exemptions.
Marine Pollutant.....	Yes.

PRODUCT: PFUS17102 EPOXY PANEL BONDER (30MIN)**SECTION 14: TRANSPORT INFORMATION**

Proof of Classification..... In accordance with Part 2.2.1 of the Transportation of Dangerous Goods Regulations (July 2, 2014) - we certify that classification of this product is correct. .

SECTION 15: REGULATORY INFORMATION

CEPA status..... Not determined.
 TSCA inventory status..... All components are listed.
 OSHA..... This product is considered hazardous under the OSHA Hazard Communication Standard.
 SARA Title III
 Section 302 - extremely hazardous None.
 substances
 Section 311/312 - hazard categories..... Immediate health, delayed health.
 Section 313..... None above De minimus % limit.
 EPA hazardous air pollutants (HAPS) Phenol.
 40CFR63
 California Proposition 65..... *** ! WARNING: This product can expose you to chemicals including [see below], which are known to the State of California to cause cancer . (Silica, vitreous). (Cristobalite).
 For more information, go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

Prepared by: REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com.
 Telephone number:..... (800) 387-7981.
 Disclaimer:..... DISCLAIMER: All information appearing herein is based upon data obtained from experience and recognized technical sources. To the best of our knowledge, it is believed to be correct as of the date of issue but we make no representations as to its accuracy or sufficiency and do not suggest or guarantee that any hazards listed herein are the only ones which exist. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. The information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.
 Review Date:..... 2021-11-15.
 Date of the latest revision of the safety .. 2018-10-05
 data sheet