PR

### SAFETY DATA SHEET

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

# PRODUCT: PF 17100 EPOXY PANEL BOND ADHESIVE

FORM

### **SECTION 01: IDENTIFICATION**

Initial supplier identifier	Wyatt Machine Tools Rupes (NZ) Limited 388 Church Street, Penrose, Auckland, New Zealand PH: (09) 525 1000 Email: info@wyatt.co.nz Emergency number 0800 992 881 (0800WYATT1)
Product identifier Recommended use and restrictions on use Chemical family Hazard rating	PF 17100 EPOXY PANEL BOND ADHESIVE Adhesive applications. for industrial use only-keep out of reach of children. This product should not be used for any other purpose other than the ones described in this section.
NFPA rating HMIS	

## **SECTION 02: HAZARD IDENTIFICATION**



Signal Word Hazard Classification	Skin Corrosion/Irritation — Category 1. Sensitization - Skin — Category 1. Serious Eye Damage/Eye Irritation — Category 1. Specific Target Organ Toxicity — Repeated
Hazard Description	Exposure — Category 1. Carcinogen 1A. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H350 May cause cancer. H372 Causes damage to the liver and kidneys through prolonged or repeated exposure.
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. P261 Avoid breathing mists, vapours and sprays. P264 Wash thoroughly after handling. P270 Do not eat drink or smoke while using this product. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves and eye protection. P284 In case of inadequate ventilation wear respiratory protection.
Response	P301 + P330 + P331 If swallowed, rinse mouth and do not induce vomiting. P302 + P352 - If on skin: wash with plenty of water. P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower . P310 - Immediately call your local poison control centre. P304 + P340 - If inhaled remove person to fresh air and keep 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 until medical help arrives. P308 + P313 If exposed or concerned, get medical advice/attention. P321 - For specific treatment see section 4 on this SDS. P337 + P313 - If eye irritation persists get medical attention. P362 + P364 - Take off contaminated clothing and wash before reuse.
Storage Disposal	P405 Store locked up.

# **SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %	
PART A:			
POLYMER	25068-38-6	50-60	
CYCLOHEXANEDIMETHANOL DIGLYCIDYL ETHER	14228-73-0	10-15	
3-(Trimethoxysilyl) Propyl Glycidil	2530-83-8	1.5-5	
Cristobalite (SiO2)	14464-46-1	1-1.5	
Quartz	14808-60-7	0.5-1	

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Carbon Black PART B:	1333-86-4	0.1-0.5
9,12-OCTADECADIENOIC ACID-BASED POLYAMIDOAMINE	68541-13-9	30-40
Polyglycol Diamine	4246-51-9	10-15
2,4,6-Tris(Dimethylaminomethyl) Phenol	90-72-2	5-10
1H-Imidazole	288-32-4	1.5-5
1,5-Pentanediamine, 2-methyl-	15520-10-2	1.5-5
Bis-((Dimethylamino)methyl) phenol	71074-89-0	1-1.5
CRISTOBALITE	14464-46-1	0.1-0.5

#### **SECTION 04: FIRST-AID MEASURES**

Eye contact	In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Check for and remove any contact lenses, if safe and easy to do so.
Skin contact	Obtain medical attention. Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse. Do not peel solidified product off the skin. If irritation persists,
Inhalation	seek medical attention. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention
Ingestion	difficult, give oxygen, obtain medical attention. Do not induce vomiting. Rinse mouth with water. Give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs
	have victim lean forward with head down to prevent aspiration of fluid into the lungs. Get medical attention.
Additional information	Eye: stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapours have produced reversible corneal epithelial
	edema impairing vision. Skin: this compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. Ingestion: treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. Respiratory: this compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be
	removed from exposure to any isocyanate. In the event of an incident involving this product ensure that medical authorities are provided a copy of this safety data sheet. In all cases, if irritation persists seek medical attention.

## **SECTION 05: FIRE-FIGHTING MEASURES**

Suitable extinguishing media Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products	Dry chemical. Carbon dioxide. In cases of larger fires, water spray should be used. Oxides of carbon (CO, CO2). Oxides of nitrogen. Phenols. Formaldehyde. Other potentially toxic fumes.
Special protective equipment andprecautions for fire-fighters	Firefighter should be equipped with self-contained breathing apparatus and full protective clothing to protect against potentially toxic and irritating fumes. During a fire, isocyanate vapours and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture. Heat will cause pressure buildup and may cause explosive rupture.

# SECTION 06: ACCIDENTAL RELEASE MEASURES

Leak/spill	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.
Major spills	If temporary control of isocyanate vapour is required, a blanket of protein foam may be placed over spill. If transportation spill occurs in United States, call Chemtrec 1-800-424-9300. If transportation spill occurs in Canada, call Canutec at (613) 996-6666. Large quantities may be pumped into closed, but not sealed, containers for disposal.
Clean up	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. Decontaminate spill area with decontamination solution. Area can then be washed with soap and water



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#### **SECTION 07: HANDLING AND STORAGE**

Precautions for safe handling	ventilation. Decomposition products can be highly toxic and irritating. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapour or spray mist. Warning properties (irritation of the eyes, nose and throat or odour)
Conditions for safe storage, including any incompatibilities	are not adequate to prevent chronic overexposure from inhalation. Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Wear respiratory protection if material is heated, sprayed, used in confined space, or if exposure limit is exceeded. Employee education and training are important. Store in tightly closed containers to prevent moisture contamination. Store in a cool, dry and well ventilated area. Do not reseal if contamination is suspected. Exposure to vapours of heated isocyanates can be extremely dangerous.

### **SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

INGREDIENTS	TWA	GIH TLV STEL	OSH	IA PEL STEL	NIOSH REL
POLYMER CYCLOHEXANEDIMETH ANOL DIGLYCIDYL ETHER	Not Established Not established	Not Established Not established	Not Established Not established	Not Established Not established	Not Established Not established
3-(Trimethoxysilyl) Propyl Glycidil	Not available Not available	Not available	Not available	Not available	Not available
Cristobalite (SiO2)	0.025 mg/m3	Not Established	0.05 mg/m3	Not Established	0.05 mg/m3
Quartz	0.025 mg/m3	Not Established	0.1 mg/m3 Respiratory	Not Established	0.05 mg/m3
Carbon Black	3 mg/m3 CA ON: 3 mg/m3 (	Not established (Inhalable) TWA	3.5 mg/m3	Not established	3.5 mg/m3
9,12-OCTADECADIENOI C ACID-BASED POLYAMIDOAMINE	Not established	Not established	Not established	Not established	Not established
Polyglycol Diamine	Not Established	Not Established	Not Established	Not Established	Not Established
2,4,6-Tris(Dimethylamino methyl) Phenol	Not available	Not available	Not available	Not available	Not available
	Not available				
1H-Imidazole	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
Bis-((Dimethylamino)meth yl) phenol		Not established	Not established	Not established	Not established
CRISTOBALITE	0.025 mg/m3	Not established	Not established	Not established	0.05 mg/m3
Eye/type Eye/type Respiratory/type Respiratory/type Chemical safety goggles. Chemical safety goggles and full faceshield if a splash hazar exists. Contact lenses should not be worn when working with this chemical. In case of insufficient ventilation, wear suitable respiratory equipment. An approved ai purifying respirator with organic vapour cartridges and particulate prefilter can be used minimize exposure. However, this should be permitted only for short periods of time (< hour) at relatively low concentrations (at or near the exposure limit). Protection provide air-purifying respirators is limited. The use of a positive pressure air supplied respirator mandatory when airborne concentrations are not known or airborne solvent levels are times the appropriate exposure limit or spraying is performed in a confined space or will imited ventilation. Use NIOSH approved respirator or equipment. Do not exceed the u limits of the respirator.		hical. An approved air ter can be used to priods of time (< 1 otection provided by oplied respirator is lvent levels are 10 ned space or with			
Gloves/ type		Chemical resistant gloves hygiene, wash thoroughly	/ before handling any	food.	C C
Clothing/type		Wear adequate protective exposure.	e clothes. Wear long s	sleeves and trousers to p	prevent dermal
Footwear/type Other/type		Safety boots per local rec Eye wash facility and em employees on the safe us	ergency shower shoul	ld be in close proximity. product.	Educate and train

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Appropriate engineering controls	Mechanical ventilation systems used to ventilate corrosive storage or process areas must be designed with components that are corrosion resistant. Ventilate adequately. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. Avoid breathing mists; if general ventilation or local exhaust is inadequate, persons exposed to mists should wear approved breathing devices.
	persons exposed to mists should wear approved breathing devices.

#### SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state Colour Odour Odour threshold (ppm) Vapour pressure (mm Hg) Vapour density (air=1) pH	Part A:. No data.	Part B:. Viscous liquid. Part B:. Tan. Part B:. Very faint, amine-like. Part B: . No data. Part B:. <10.000 hPa @ 20C. Part B:. >1. Part B: . No Data.
Relative Density (Specific Gravity)	Part A:. 1.089 g/cm3 @ 20C. 9.06 lb/ga 25C.	l @ 25C. Part B:. 1.13 g/cm3 @ 20C. 9.4 lb/gal @
Melting / Freezing point (deg C) Solubility Initial boiling point / boiling range (deg C). Evaporation rate Flash point (deg C), method Auto ignition temperature (deg C) Upper flammable limit (% vol) Lower flammable limit (% vol) Partition coefficient — n-octanol/water VOC LBS/GAL less water	Part A: . Not available. Part A: . Practically insoluble in water. Part A: . >150°C (>302°F). Part A: . Not available. Par Part A: . >99°C (>210°F) Setaflash Clos Part A: . Not available. Part A: . No data. Part A: . No Data. Part A: . No tavailable. Part A: . Not available. Part A: . 2.55 lb/USG - 305.57 g/L.	Part B: . Insoluble in water. Part B:. No data. t B: . 1.0. Ethyl ether = 1.0. ed Cup. Part B:. >93.4°C, >200°F . Part B:. No data. Part B: . No data. Part B: . No data. Part B: . No data.

# SECTION 10: STABILITY AND REACTIVITY

Chemical stability Reactivity Conditions to avoid Conditions to avoid, including static	Contact with moisture and other materials will react with isocyanates. Excessive heat, flames and sparks, exposure to air and moisture. Acids, amines, bases, fluorides, oxidizing agents, peroxides, water.
discharge, shock or vibration Hazardous decomposition products	Carbon oxides, formaldehydes, hydrocarbons, hydrogen cyanide, nitrogen oxides, phenols, silicone polymers.
Possibility of hazardous reactions	Product will not undergo hazardous polymerization .

# SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
POLYMER	No Data	2,020 mg/kg oral rat
CYCLOHEXANEDIMETHANOL DIGLYCIDYL ETHER	No Data	2,500 mg/kg oral (rat)
3-(Trimethoxysilyl) Propyl Glycidil	>5.3 mg/L	8,025 mg/kg (oral rat) 4,250 mg/kg (dermal rabbit)
Cristobalite (SiO2)	No Data	8030 mg/kg oral, rat 4248 mg/kg dermal, rabbit
Quartz	Not Available	Not Available
Carbon Black	Not available	>10,000 mg/kg (oral rat ) 3,000 mg/kg (dermal rabbit)
9,12-OCTADECADIENOIC ACID-BASED POLYAMIDOAMINE	No Data	No data
Polyglycol Diamine	2.9 mg/L rat	1,690 mg/kg oral rat >2150 mg/kg dermal rabbit
2,4,6-Tris(Dimethylaminomethyl) Phenol	>0.5 mg/L 1Hr Inhalation, Rat	1200 mg/kg oral rat 1280 mg/kg dermal rabbit
1H-Imidazole	No Data	970 mg/kg oral rat
1,5-Pentanediamine, 2-methyl-	4.9 mg/L	1,690 mg/kg oral rat
Bis-((Dimethylamino)methyl) phenol	Not Available	Not Available
CRISTOBALITE	No data	No data

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#### SECTION 11: TOXICOLOGICAL INFORMATION

Route of exposure Effects of acute exposure	Eye contact. Skin contact. Inhalation. SKIN: Irritant. Can cause reddening, itching and swelling. May cause allergic reaction to skin. Contact with fibrous glass or its dust can cause skin irritation. EYE: Product liquid, aerosols or vapours are irritating. Can cause tearing, reddening and swelling. INHALATION: Breathing this material may be harmful or fatal. Vapour/mists at concentrations above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract. This can cause a runny nose, sore throat, coughing, chest discomfort, difficulty breathing and reduced pulmonary functioning. INGESTION: Swallowing this material may be harmful or fatal. Symptoms can include severe stomach and intestinal irritation, abdominal pain and vomiting of blood.
Effects of chronic exposure	SKIN: Can cause permanent skin damage. EYE: Čan cause permanent eye damage and can injure the cornea and cause blindness. INHALATION: Breathing this material may be harmful or fatal. Prolonged and repeated exposure of dust may result in progressive and permanent lung disease which may cause death from respiratory and/or heart failure. INGESTION: Swallowing this material may be harmful or fatal. Symptoms can include
Carcinogenicity	severe stomach and intestinal irritation, abdominal pain and vomiting of blood. Swallowing this mater may cause burns and destroy internal tissues. Low blood pressure and shock may also occur as a result of severe tissue injury. This product contains Crystalline silica and Carbon Black that are known to the State of California to cause cancer. The IARC and NTP have determined that there is sufficient evidence in humans and experimental animals for the carcinogenicity of inhaled crystalline silica in the form of guartz or cristobalite.
Reproductive effects	No known reproductive effects.

#### **SECTION 12: ECOLOGICAL INFORMATION**

Environmental
Persistence and degradability

Do not allow to enter waters, waste water or soil. 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. Industrial incineration is the preferred method. Empty containers retain product residue; observe all precautions for the product. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. Do not heat or cut empty containers with electric or gas torch as vapours and gases may be toxic.

#### **SECTION 14: TRANSPORT INFORMATION**

TDG Classification	Corrosive Liquid, Basic, Organic, N.O.S. (2,4,6-Tris(Dimethylaminomethyl)Phenol, Aliphatic Amine) - Class 8 - UN3267 - Packing Group III - This product meets limited quantity
	exemption when shipped in containers less than 5 litres
IATA Classification (Air)	Corrosive Liquid, Basic, Organic, N.O.S. (2,4,6-Tris(Dimethylaminomethyl)Phenol, Aliphatic Amine) - Class 8 - UN3267 - Packing Group III
IMDG Classification (Marine)	Corrosive Liguid, Basic, Organic, N.O.S. (2,4,6-Tris(Dimethylaminomethyl)Phenol, Aliphatic
Marine Pollutant	Amine) - Class 8 - UN3267 - Packing Group III - EmS F-A, S-B . Potential marine pollutant.
Proof of Classification	

### **SECTION 15: REGULATORY INFORMATION**

CEPA status TSCA inventory status OSHA SARA Title III	
Section 302 - extremely hazardous	None.
Section 311/312 - hazard categories Section 313 EPA hazardous air pollutants (HAPS) 40CFR63	None.
California Proposition 65	This product contains crystalline silica (Quartz) and carbon black that are known to the State of California to cause cancer.
(NZ) Statement	This substance is classified hazardous according to the EPA Hazardous Substances
(NZ) HSNO Classifications (NZ) HSNO Group Standard	(Classification) Notice 2017. 8.2A. 6.5B. 8.3A. 6.9A. 6.7A. Surface Coatings/Colourants - Toxic 6.7 HSR002679.

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# **SECTION 16: OTHER INFORMATION**

Prepared by: Telephone number: Disclaimer:	(800) 387-7981. 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: Date of the latest revision of the safety data sheet	2023-11-15. 2019-11-15

