



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

PRODUCT: PF 7773 PLIOGRIP® URETHANE STRUCTURAL ADHESIVE (3.5 MIN OPEN TIME)

SECTION 01: IDENTIFICATION

Product identifier..... PF 7773 PLIOGRIP® URETHANE STRUCTURAL ADHESIVE (3.5 MIN OPEN TIME)
Initial supplier identifier..... Pro Form Products Ltd.
604 McGeachie Drive
Milton, Ontario L9T3Y5
Tel (905) 878-4990 Fax (905) 878-1189
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 **.
Recommended use and restrictions on .. Adhesive applications. Industrial use only.
use
Chemical family..... Epoxy adhesives.
Hazard rating
NFPA rating..... Health: 3 Fire: 1 Reactivity: 0.
HMIS..... H: 3 F: 1 R: 0.

SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER.
Hazard Classification..... Sensitization - Respiratory — Category 1. Sensitization - Skin — Category 1. Skin Corrosion/Irritation — Category 2. Serious Eye Damage/Eye Irritation — Category 2A. Reproductive Toxicity — Category 2. Specific Target Organ Toxicity — Repeated Exposure — Category 2. (Respiratory Tract, Respiratory System, Inhalation). Specific Target Organ Toxicity — Single Exposure — Category 3. (Respiratory System). Acute Toxicity (Inhalation) — Category 4.
Hazard Description..... 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. H336 May cause drowsiness or dizziness. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs 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 the mist, vapours, or spray. P261 Avoid breathing mists, vapours and sprays. P264 Wash 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 and eye protection. P284 In case of inadequate ventilation wear respiratory protection.
Response P302 + P352 - If on skin: wash with plenty of water. 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. P312 Call a POISON CENTER/doctor if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P321 - For specific treatment see section 4 on this SDS. P332 + P313 - If skin irritation occurs get medical attention or advice. P333 + P313 If skin irritation or rash occurs, get medical advice/attention. P337 + P313 - If eye irritation persists get medical attention. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor. P362 + P364 - Take off contaminated clothing and wash before reuse.
Storage..... P403 + P233 Store in a well ventilated area. Keep container tightly closed. P405 Store locked up.
Disposal..... P501 Dispose all unused, waste or empty containers in accordance with local regulations.
Other hazards..... The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 7.3084 %.

PRODUCT: PF 7773 PLOGRIP® URETHANE STRUCTURAL ADHESIVE (3.5 MIN OPEN TIME)**SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
PART A:		
Polymer	HMIRC # 3486377	10-30
Aluminum Silicates	Non-Hazardous	10-30
Urethane Prepolymer	HMIRC # 3486376	5-10
Benzene, 1,1'-methylenebis[4-isocyanato- (MDI)	101-68-8	30-40
Talc	14807-96-6	10-15
Propylene carbonate	108-32-7	0.5-1.5
PART B:		
Clay (Talc)	14807-96-6	20-30
Piperazine	110-85-0	0.5-1

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. Protect unharmed eye. Obtain medical attention.
Skin contact.....	Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse. If irritation persists, seek medical attention.
Inhalation.....	Move to fresh air. Immediately call a POISON CENTER/doctor. Keep victim warm and at rest. If unconscious place in recovery position and seek medical advice.
Ingestion.....	Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately. .
Most important symptoms and effects, whether acute or delayed	Pulmonary edema may be delayed. Other symptoms may include but not limited to: Stomach or intestinal upset (nausea, vomiting, diarrhea). Irritation (nose, throat, airways). Cough. Headache. Chest pain. Lung edema (fluid buildup in the lung tissue). Difficulty breathing. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful by inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled.
Additional information.....	No hazards which require special first aid measures.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable extinguishing media.....	Dry chemical. Carbon dioxide. Water spray. Foam.
Unsuitable extinguishing media.....	Do not use solid water streams or water jet.
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products	Hazardous combustion products may include but not limited to: Carbon dioxide. Carbon monoxide. Oxides of nitrogen. Hydrogen cyanide. Isocyanates. Aldehydes. Ketones. Chlorine compounds. Halogenated hydrocarbons. Hydrocarbons.
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. Dispose of all runoff water as hazardous waste in accordance with all Local, Provincial and Federal Regulations.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Environmental precautions.....	Do not allow product to leak into drains or waterways. If spill does contaminate waterways then inform authorities. Prevent further leakage of product if safe to do so.
Personal precautions, protective equipment and emergency procedures	Use personal protection equipment. Ensure adequate ventilation. Keep unnecessary and unprotected personnel from entering spill area and upwind from spill area.
Methods and materials for containment and cleaning up	Soak up with inert material. Keep in suitable container for disposal. Dispose of waste material in accordance with all Local, Provincial and Federal Regulations.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....	Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours, mist or dust. Do not smoke. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Empty container is hazardous. Avoid exposure - obtain special instructions before use. Avoid skin and eye contact. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water according to local, Provincial and Federal guidelines.
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PRODUCT: PF 7773 PLOGRIP® URETHANE STRUCTURAL ADHESIVE (3.5 MIN OPEN TIME)**SECTION 07: HANDLING AND STORAGE**

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry and well ventilated area. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. No decomposition if stored and applied as directed.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Polymer	Not available	Not available	Not available	Not available	Not available
Aluminum Silicates	Not available	Not available	Not available	Not available	Not available
Urethane Prepolymer	Not available	Not available	Not available	Not available	Not available
Benzene, 1,1'-methylenebis[4-isocyanato- (MDI)	0.005 ppm	Not available	0.005 ppm TWA	0.005 ppm AB OEL TWA	0.05 mg/m3
Talc	2 mg/m3 CA ON: 2mg/kg (TWA)	Not available	2 mg/m3 TWA	Not available	2 mg/m3
Propylene carbonate	Not established		Not established		Not established
Clay (Talc)	2 mg/m3	Not established	2 mg/m3 TWA	3 mg/m3 - QUE	Not established
Piperazine	Not established	Not established	Not established	Not established	Not established
Eye/type.....	Chemical safety goggles and full faceshield if a splash hazard exists. Consult your personal protective equipment supplier for additional recommendations.				
Respiratory/type.....	Wear a positive-pressure supplied-air respirator with full facepiece. Consult your personal protective equipment supplier for additional recommendations.				
Gloves/ type.....	Butyl rubber gloves. Recommended break through time 480 minutes. Consult your personal protective equipment supplier for additional recommendations.				
Clothing/type.....	Wear impervious protective clothing. Consult your personal protective equipment supplier for additional recommendations.				
Footwear/type.....	Safety boots per local regulations. Consult your personal protective equipment supplier for additional recommendations.				
Other/type.....	Eye wash facility and emergency shower should be in close proximity. Employees should wash their hands and face before eating, drinking, or using tobacco products. When using do not smoke. Wash hands at the end of the work day.				
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.				

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state.....	Part A Viscous Liquid	Part B . Liquid.
Colour.....	Beige	Green.
Odour.....	Mild, Musty	Mild, Amine-like.
Odour threshold (ppm).....	Not available	Not available.
pH.....	Mixture is non-soluble (in water)	Mixture is non-soluble (in water).
Melting / Freezing point (deg C).....	Not determined	Not determined.
Initial boiling point / boiling range (deg C).....	>200°C (>392°F)	Not available.
Flash point (deg C), method.....	> 100 °C	> 93.4 °C.
Evaporation rate.....	<1 (butyl acetate = 1)	1 (ethyl ether = 1).
Upper flammable limit (% vol).....	Not determined	No data.
Lower flammable limit (% vol).....	Not determined	No data.
Vapour pressure (mm Hg).....	<0.013 hPa @ 25C	3 hPa (25 °C) Calculated .
Relative Density (Specific Gravity).....	Not available	1.225 (77.00 °F).
Vapour density (air=1).....	>1	Not available.
Density.....	1.288 g/cm3 (20 °C)	1.225 g/cm3 (77.00 °F).
Solubility.....	Practically insoluble	No data.

PRODUCT: PF 7773 PLOGRIP® URETHANE STRUCTURAL ADHESIVE (3.5 MIN OPEN TIME)**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

Partition coefficient — n-octanol/water.....	Not determined	Not determined.
Viscosity - Dynamic.....	ca. 20,000 mPa.s	20,000 mPa.s.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No decomposition if stored and applied as directed.
Chemical stability.....	Stable at normal temperatures and pressures.
Possibility of hazardous reactions.....	Product will not undergo hazardous polymerization .
Incompatible materials.....	Acids. Alcohols. Aluminum. Amines. Ammonia. Bases. Copper alloys. Fluorides . Iron. Isocyanates. Oxidizing agents. Oxidizers. Phosphorus compounds. Strong alkalis. Strong reducing agents. Water. Zinc. Humid air.
Conditions to avoid, including static discharge, shock or vibration	Freezing temperatures. Heat. Moisture.
Hazardous decomposition products.....	Carbon monoxide, carbon dioxide. Hydrocarbons. Nitrogen oxides. Acetone.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Polymer	Not available	LD50 Oral (Rat): > 5,000 mg/kg LD50 Dermal (Rabbit): > 9,400 mg/kg
Aluminum Silicates	Not available	Not available
Urethane Prepolymer	Not available	Not available
Benzene, 1,1'-methylenebis[4-isocyanato- (MDI)	490 mg/m ³ 4 hr 0.369 mg/L 4 hr	9,200 mg/kg rat oral >7,900 mg/kg rabbit dermal
Talc	Not available	Not available
Propylene carbonate	Not available	>5000 mg/kg (oral, rat) >2000 mg/kg (dermal, rat)
Clay (Talc)	No data	No data
Piperazine	No data	1,900 mg/kg oral rat; 4,000 mg/kg dermal rabbit

Route of exposure.....	Eye contact. Skin contact. Inhalation. Ingestion.
Effects of acute exposure.....	Harmful if inhaled.
Skin corrosion/irritation.....	Causes skin irritation.
Serious eye damage/eye irritation.....	Causes serious eye irritation.
Skin Sensitization.....	May cause an allergic skin reaction.
Respiratory Sensitization.....	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carcinogenicity.....	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.
Reproductive effects.....	Suspected of damaging fertility or the unborn child.
STOT-SE.....	May cause respiratory irritation.
STOT-RE.....	May cause damage to organs (Respiratory system, Respiratory Tract) through prolonged or repeated exposure if inhaled.
Aspiration Hazard.....	Not classified.

SECTION 12: ECOLOGICAL INFORMATION

Environmental.....	Not available as a product.
Persistence and degradability.....	Not available as a product.
Bioaccumulative potential.....	Not available as a product.
Mobility in soil.....	Not available as a product.

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.
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SECTION 14: TRANSPORT INFORMATION

TDG Classification..... Not regulated.
 DOT Classification (Road)..... Not regulated.
 IATA Classification (Air)..... Not regulated.
 IMDG Classification (Marine)..... Not regulated.
 Marine Pollutant..... Potential marine pollutant.
 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..... On Domestic Substances List (DSL).
 Schedule 1..... The following substances are on CEPA's Schedule 1 and are considered CEPA Toxic. Additional reporting may be required: (CAS # 101-68-8).
 National Pollutant Release Inventory (NPRI)(CAS # 101-68-8(CAT.1A)).
 Environmental Emergency Regulations.... None listed in this product.
 Categorization of the DSL..... (CAS # 101-68-8). (CAS # 14807-96-6).
 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.
 EPA hazardous air pollutants (HAPS) None.
 40CFR63
 California Proposition 65..... None.

SECTION 16: OTHER INFORMATION

Prepared by: REGULATORY AFFAIRS.
 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.
 Date of the latest revision of the safety .. 2024-06-04
 data sheet