



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

PRODUCT: PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML

SECTION 01: Chemical product and company identification

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

Product name..... PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML

Recommended use and restrictions on use.. Primer.

Chemical family..... Mixture.

NFPA rating..... Health: 2 Fire: 3 Reactivity: 0.

HMIS..... H: 2 F: 3 R: 0.

24 hour emergency number:..... IN CANADA CALL CANUTEC 1-888-226-8832 (CAN-UTEC); IN THE UNITED STATES
CALL CHEMTREC 1-800-424-9300. .

SECTION 02: Hazards identification



Signal Word..... DANGER.

Hazard Classification..... Flammable Liquid 2. Skin Sensitizer 1. Eye Irritant 2A. Acute Toxicity 4. Respiratory Sensitizer 1. STOT SE 3. (narcotic effects).

Hazard Description..... H225 Highly flammable liquid and vapour. 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. H336 May cause drowsiness or dizziness.

Prevention..... P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P280 Wear protective gloves and eye protection. P261 Avoid breathing mists, vapours and sprays. P272 Contaminated work clothing should not be allowed out of the workplace. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well ventilated area. P284 In case of inadequate ventilation wear respiratory 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 . P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P302 + P352 - If on skin: wash with plenty of water. . P333 + P313 If skin irritation or rash occurs, get medical advice/attention. P321 - For specific treatment see section 4 on this SDS. P362 + P364 - Take off contaminated clothing and wash before reuse. 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. P337 + P313 - If eye irritation persists get medical attention. P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor if you feel unwell. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor.

Storage..... P403 + P235 Store in well ventilated area. Keep cool. P233 Keep container tightly closed. P405 Store locked up.

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

SECTION 03: Composition/Information on Ingredients

HAZARDOUS INGREDIENTS	CAS #	WT. %
Methyl Ethyl Ketone	78-93-3	60-65
Isophorone Diisocyanate	4098-71-9	1.5-2
Benzene, 1,1'-methylenebis[4-isocyanato- (MDI)	101-68-8	0.1-1.0

PRODUCT: PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML**SECTION 04: First aid measures**

Eye contact.....	Check for and remove any contact lenses, if safe and easy to do so. In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Consult a physician if irritation continues.
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.....	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion.....	Do not induce vomiting. Rinse mouth with water. 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.
Most important symptoms and effects, whether acute or delayed	Harmful if swallowed, in contact with skin or if inhaled. Can cause skin sensitization. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Additional information.....	In all cases, if irritation persists seek medical attention. 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.

SECTION 05: Fire fighting measures

Suitable and unsuitable extinguishing media	Carbon dioxide. Foam. Dry chemical. In cases of larger fires, water spray should be used. Do not use water in a jet.
Hazardous combustion products.....	Oxides of carbon (CO, CO ₂). Oxides of nitrogen. Hydrogen cyanide. Isocyanates. Dense black smoke. Other potentially toxic fumes.
Special fire fighting procedures.....	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.
Unusual fire / explosion hazards.....	During a fire, irritating and toxic gases and aerosols may be generated by thermal decomposition and combustion.

SECTION 06: Accidental release measures

Leak/spill.....	Isolate area and keep unauthorized people away. Do not walk through spilled material. Follow all applicable fire and explosion precautions during the spill response procedure. Avoid breathing vapours and skin contact. Remove sources of ignition if combustible or flammable vapours may be present and ventilate area. Open windows and doors to allow air circulation. Wear recommended protective equipment. Dike area to prevent spreading. The use of absorbent socks or spill pillows may be required. Absorb with earth, sand, or another dry inert material. Pick up waste material and place in an appropriate container for disposal. Use explosion-proof or hand pumps and non-sparking tools and equipment. 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. Prevent runoff into drains, sewers, and other waterways.
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SECTION 07: Handling and storage

Handling procedures.....	Avoid skin and eye contact. Avoid breathing vapours or mist. Use adequate ventilation. Ensure that equipment is properly bonded and grounded during filling and transferring as product may become electrostatically charged. Ground handling equipment. Keep container closed when not in use. Do not reseal if contamination is suspected. 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.
Storage needs.....	Keep away from heat, sparks, and open flames. Store in a cool, dry and well ventilated area. Store away from sunlight. Keep container closed when not in use. Do not reseal if contamination is suspected.

PRODUCT: PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML**SECTION 08: Exposure controls / personal protection**

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Methyl Ethyl Ketone	200 ppm	300 ppm	200 ppm	Not established	200 ppm TWA
Isophorone Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin
Benzene, 1,1'-methylenebis[4-isocy anato- (MDI)	0.005 ppm	Not established	0.005 ppm TWA	0.005 ppm AB OEL TWA	0.05 mg/m3
Protective equipment					
Eye/type.....	Chemical safety goggles. Chemical safety goggles and full faceshield if a splash hazard exists.				
Gloves/ type.....	Chemical resistant gloves.				
Footwear/type.....	Safety boots per local regulations.				
Clothing/type.....	Wear adequate protective clothes. Wear long sleeves and trousers to prevent dermal exposure.				
Respiratory/type.....	In case of insufficient ventilation, wear suitable respiratory equipment. An approved air purifying respirator with organic vapour cartridges and particulate prefilter can be used to minimize exposure. Respiratory equipment required during spraying. The use of a positive pressure air supplied respirator is mandatory when airborne concentrations are not known or airborne solvent levels are 10 times the appropriate exposure limit or spraying is performed in a confined space or with limited ventilation. Be sure to use NIOSH approved respirator or equipment. Do not exceed the use limits of the respirator.				
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.				
Appropriate engineering controls.....	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.				
Monitoring.....	Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded.				
Medical surveillance.....	Medical supervision of all employees who handle or come in contact with isocyanates is recommended. These should include preemployment and periodic medical examinations with pulmonary function test (FEC, FVC as a minimum). Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurring skin eczema or sensitization should be excluded from working with isocyanates. Once a person is diagnosed as sensitized to an isocyanate, no further exposure can be permitted.				

SECTION 09: Physical and chemical properties

Physical state.....	Liquid.
Colour.....	Black.
Odour.....	Solvent odour.
Odour threshold (ppm).....	Not available.
pH.....	Not available.
Melting / Freezing point (deg C).....	Not Available.
Initial boiling point / boiling range (deg C)....	80 (estimated).
Flash point (deg C), method.....	-10 (14F).
Evaporation rate.....	Not available.
Flammability (solids and gases).....	Not applicable.
Upper explosive limit (% vol).....	11.5.
Lower explosive limit (% vol).....	0.8.
Vapour pressure (mm Hg).....	150 hPa (estimated).
Vapour density (air=1).....	2.5 (estimated).
Relative Density (Specific Gravity).....	0.95 g/ml.
Solubility.....	Reacts slowly with water.
Coefficient of water/oil distribution.....	Not available.
Auto ignition temperature (deg C).....	400 (752F).
Decomposition temperature.....	Not available.
Viscosity.....	Not Available.
% Volatile by volume.....	Not Available.
VOC.....	588.1 g/L - 4.91 lb/USG.

SECTION 10: Stability and reactivity

Reactivity	Avoid heat, sparks and flames. Avoid contact with water or moisture. MEK may react with aluminum.
Chemical stability.....	Stable at normal temperatures and pressures.

PRODUCT: PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML**SECTION 10: Stability and reactivity**

Possibility of hazardous reactions.....	Combustion will give rise to the formation of dangerous products. May generate peroxides on contact with air, light, or oxidizing agents.
Conditions to avoid.....	Electrostatic charge. High heat. Oxidizing agents. Acids may cause large heat release, splashing of hot material. . Acids. Bases. Ammonia. Copper. Chloroform. Hydrogen peroxide.
Hazardous decomposition products.....	See hazardous combustion products section 5.

SECTION 11: Toxicological information

INGREDIENTS	LC50	LD50
Methyl Ethyl Ketone	>5,000 ppm (6 hours, rat) 11000 ppm (45 minutes, mouse)	3,400 mg/kg (rat, oral) >8000 mg/kg (rabbit, dermal) 670 mg/kg (mouse, oral)
Isophorone Diisocyanate	123 mg/m3 4 hours rat	>1,000 mg/kg rat oral 1,060 mg/kg rat dermal
Benzene, 1,1'-methylenebis[4-isocyanato- (MDI)	490 mg/m3 4 hr 0.369 mg/L 4 hr	9,200 mg/kg rat oral >7,900 mg/kg rabbit dermal

Route of exposure.....	Eye contact. Skin contact. Inhalation.
Effects of acute exposure.....	Causes eye irritation. Can cause tearing, reddening and swelling. May cause temporary corneal damage. May cause skin irritation. Isocyanate 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, difficult breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms, as well as asthma attack. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure. Effects are usually reversible. Can result in irritation in the digestive tract. Aspiration of liquid into lungs can cause chemical pneumonitis. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea. May cause central nervous system effects such as headache, nausea, vomiting and weakness.
Effects of chronic exposure.....	As a result of previous repeated overexposure or a single large dose, certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the exposure limit. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and, in severe cases, for several years. Prolonged or repeated exposure may cause lung damage, including a decrease in lung function. Prolonged skin contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, sensitization. Sensitization can be permanent. Prolonged vapour contact may cause conjunctivitis. Prolonged or repeated skin contact can lead to skin cancer. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal .
Sensitizing capability of material.....	Isocyanates are known to cause skin and respiratory sensitization in humans. Animal tests have indicated that respiratory sensitization can result from skin contact with diisocyanates.
Reproductive effects.....	In one study, Methyl Ethyl Ketone has been found to cause embryol toxicity in large concentrations.
Carcinogenicity of material.....	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC or ACGIH.

SECTION 12: Ecological information

Environmental.....	Do not allow to enter waters, waste water or soil.
Persistence and degradability.....	Not available.

SECTION 13: Disposal considerations

Waste disposal.....	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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PRODUCT: PF 230 PINCHWELD AND GLASS BOND PRIMER 30ML**SECTION 14: Transport information**

TDG Classification..... UN1139 - COATING SOLUTION - Class 3 - Packing Group II - This product meets the limited quantity exemption when packaged in containers less than 5 Litres.
 DOT Classification (Road)..... UN1139 - COATINGS SOLUTION - Class 3 - Packing Group II . Ltd Qty (5 Liters/1.3 Gallons).
 IATA Classification (Air)..... UN1139 - COATING SOLUTION - Class 3 - Packing Group II . Limited Quantity.
 IMDG Classification (Marine)..... UN1139 - COATING SOLUTION - Class 3 - Packing Group II - EmS: F-E S-E. Check IMDG regulations for limited quantity exemptions.
 Marine Pollutant..... No.
 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..... Not determined.
 OSHA..... This product is considered hazardous under the OSHA Hazard Communication Standard.
 SARA Title III
 Section 302 - extremely hazardous substances None.
 Section 311/312 - hazard categories..... Immediate health, delayed health, fire hazard.
 Section 313..... Isophorone Diisocyanate.
 EPA hazardous air pollutants (HAPS) Methylene Diphenyl Diisocyanate (MDI).
 40CFR63
 California Proposition 65..... This product does not contain any chemical(s) known to the State of California to cause cancer or reproductive toxicity.

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.
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