



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

**PRODUCT: PF 490-1 DIRECT TO METAL 2K URETHANE HIGH BUILD PRIMER
3.78L**

SECTION 01: IDENTIFICATION

Product identifier..... PF 490-1 DIRECT TO METAL 2K URETHANE HIGH BUILD PRIMER 3.78L
Other means of identification
Chemical family..... Acrylic coating.
Recommended use and restrictions on .. Paints.
use
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 **.

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NFPA rating..... Health: 2 Fire: 4 Reactivity: 0.
HMIS..... H: 2 F: 4 R: 0.

SECTION 02: HAZARD IDENTIFICATION



Hazard Classification..... Flammable Liquid 2. Skin Irritation — Category 2. Eye Irritation — Category 2A. Specific Target Organ Toxicity — Single Exposure — Category 3. (narcotic effects). Carcinogenicity — Category 1. Reproductive Toxicity — Category 2.

Signal Word..... DANGER.

Hazard Description..... H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H350 This product contains ingredients that may cause cancer. H361 Suspected of damaging fertility or the unborn child.

Prevention..... P201 Obtain special instructions before use. P202 Do not handle this product until all safety instructions have been read and understood. 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. P261 Avoid breathing mists, vapours and sprays. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well ventilated area. P280 Wear protective gloves and eye protection.

Response P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower . P302 + P352 - If on skin: wash with plenty of water. P362 + P364 - Take off contaminated clothing and wash before reuse. P332 + P313 - If skin irritation occurs get medical attention or advice. 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. P308 + P313 If exposed or concerned, get medical advice/attention. P312 Call a POISON CENTER/doctor if you feel unwell.

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

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

Note This product mixture has been classified based on its ingredients.

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SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Talc	14807-96-6	10-30
n-Butyl Acetate	123-86-4	7-13
tert-Butyl acetate	540-88-5	7-13
4-Chlorobenzotrifluoride	98-56-6	5-10
Titanium Dioxide	13463-67-7	3-7
Xylene	1330-20-7	1-5
Distillates (Petroleum) Hydrotreated Light	64742-47-8	0.5-1.5
Ethylbenzene	100-41-4	0.1-1.5
Crystalline silica	14808-60-7	0.1-1

<<The actual concentration(s) withheld as a trade secret>> .

SECTION 04: FIRST-AID MEASURES

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. If spontaneous vomiting occurs have victim lean forward with head down to prevent aspiration of fluid into the lungs. Never give anything by mouth to an unconscious person.
Skin contact.....	Immediately remove all contaminated clothing, flush skin with water for at least 15 minutes. Wash clothing before reuse. If irritation persists, seek medical attention.
Eye contact.....	In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Consult a physician if irritations continues. Check for and remove any contact lenses, if safe and easy to do so.
Most important symptoms and effects, whether acute or delayed	Causes skin irritation. Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Harmful by inhalation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. This product contains ingredients that may cause cancer. Suspected of damaging 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.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media	"Alcohol" foam, CO2, 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	Toxic vapours may be evolved upon exposure to heat or open flame. Take precautionary measures against electrostatic loading. Thermal decomposition products are toxic. May include: Oxides of carbon (CO, CO2).
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. Solvent vapours may be heavier than air and may build up and travel along the ground to an ignition source, which may result in a flash back to the source of the vapours. Cool fire-exposed containers with cold water spray. Heat will cause pressure buildup and may cause explosive rupture.

SECTION 06: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. 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. Take precautions against static discharge. Equipment should be grounded.
Methods and materials for containment and cleaning up Leak/spill.....	Ventilate. Eliminate all sources of ignition. Contain the spill. Avoid all personal contact. Evacuate all non-essential personnel. Prevent runoff into drains, sewers, and other waterways. Use non-sparking tools and equipment to pick up the spilled material. Absorb with an inert dry material and place in an appropriate waste container. 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.

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SECTION 07: HANDLING AND STORAGE

Precautions for safe handling..... Keep away from heat, sparks, and open flame. Always adopt precautionary measures against build-up of static which may arise from appliances, handling and the containers in which product is packed. Ground handling equipment. Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Avoid breathing vapours or mist. Handle and open container with care. Employees should wash hands and face before eating or drinking.

Conditions for safe storage, including any incompatibilities Keep away from heat, sparks, and open flames. Store away from oxidizing and reducing materials. Store away from sunlight. Keep container closed when not in use.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL		REL	NIOSH
				PEL	STEL		
Talc	2 mg/m3	Not established	2 mg/m3 TWA	3 mg/m3 - QUE		Not established	
n-Butyl Acetate	50 ppm	150 ppm	150 ppm	200 ppm		150 ppm / STEL 200 ppm	
	CA ON: 50ppm (TWA), 150ppm (STEL)						
tert-Butyl acetate	200 ppm	Not established	200 ppm	Not established		200 ppm	
	CA ON: 50ppm (TWA), 150ppm (STEL)						
4-Chlorobenzotrifluoride	Not established	Not established	Not established	Not established		Not established	
Titanium Dioxide	10 mg/m3	Not established	15 mg/m3	Not established		Not established	
Xylene	50 ppm	150 ppm	100 ppm TWA	Not established		Not established	
Distillates (Petroleum) Hydrotreated Light	1200 mg/m3	197 ppm	Not established	Not established		Not established	
Ethylbenzene	100 ppm	125 ppm	100 ppm	Not established		100 ppm / STEL 125 ppm	
Crystalline silica	Not Established	Not Established	Not Established	Not Established		Not Established	
	CA ON: 0.10 mg/m3 (Resp) TWA						
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. Explosion-proof exhaust ventilation.						
Personal Protective Equipment							
Eye/type.....	Chemical safety goggles. Chemical safety goggles and full faceshield if splash hazard exists.						
Gloves/ type.....	Wear skin protection equipment. The selection of skin protection equipment depends on the nature of the work to be performed. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Contact glove supplier for recommendations.						
Respiratory/type.....	Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.						
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..... Liquid.

Colour..... Gray.

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). Not available.

Flash point (deg C), method..... 4 C. (estimate; lowest flash point ingredient).

Evaporation rate..... Not available.

Flammability (solids and gases)..... Not applicable. Flammable liquid.

Upper flammable limit (% vol)..... 11.6.

Lower flammable limit (% vol)..... 0.9.

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SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Vapour pressure (mm Hg).....	Not available.
Vapour density (air=1).....	>1.
Relative Density (Specific Gravity).....	1.437.
Pounds / USG.....	12.00.
Solubility.....	Negligible.
Partition coefficient — n-octanol/water.....	Not available.
Auto ignition temperature (deg C).....	> 200°C.
Decomposition temperature.....	Not available.
Viscosity.....	1550 cPs. #4 @ 20 RPM. (Brookfield).
% Volatile by volume.....	24.66.
VOC less exempt volatiles.....	2.58 lbs/USG; 309.2 g/L.
VOC less water.....	1.80 lbs/USG; 215.7 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 discharge, shock or vibration	Avoid heat, spark, open flames. Electrostatic charge.
Incompatible materials.....	Strong acids. Strong bases. Strong oxidizers. Reducing agents.
Hazardous decomposition products.....	No hazardous decomposition products when stored and handled correctly. Hazardous decomposition products depend on temperature, air supply, and the presence of other materials. See hazardous combustion products section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Talc	Not available	Not available
n-Butyl Acetate	390 ppm (4 hr.)	10768 mg/kg (rat oral) 17600 mg/kg (rabbit dermal)
tert-Butyl acetate	>2,230 mg/m ³ 4 hours rat	4,100 mg/kg (rat, oral); >2,000 mg/kg (rabbit, dermal)
4-Chlorobenzotrifluoride	4479 ppm	>6,800 mg/kg (rat oral); >2,700 mg/kg (rabbit dermal)
Titanium Dioxide	>6.8 mg/L (4 hr)	> 10,000 mg/kg (rat, oral) > 10,000 mg/kg (rabbit, dermal)
Xylene	6350 ppm 4 hours rat	>3523 mg/kg rat oral
Distillates (Petroleum) Hydrotreated Light	>5.2 mg/L (4 hr.)	>5000 mg/kg (oral, rat) >2000 mg/kg (dermal, rabbit)
Ethylbenzene	No data	3,500 mg/kg rat oral 17,800 mg/kg rabbit dermal
Crystalline silica	Not Available	Not Available
Route of exposure.....	Skin contact. Eye contact. Inhalation.	
Symptoms related to the physical, chemical and toxicological characteristics		
Effects of acute exposure.....	Can be irritating to eyes and skin. Can cause redness and irritation. May cause drying or flaking of the skin. Harmful if inhaled. 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. Inhalation of vapours or mist may cause drowsiness or dizziness.	
Effects of chronic exposure.....	Breathing high concentrations of vapour may cause anesthetic effects and serious health effects. Prolonged or repeated breathing of talc may result in progressive and permanent lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity. . Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal . Chronic exposure to organic solvent vapors have been associated with various neurotoxic effects including permanent brain and/or nervous system damage, kidney, liver, blood damage and reproductive effects among women. Symptoms may include nausea, vomiting, abdominal pain, headache, impaired memory, loss of coordination, insomnia and breathing difficulties.	
Skin absorption.....	Chronic skin exposure to solvents may cause effects similar to those identified under chronic inhalation.	

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SECTION 11: TOXICOLOGICAL INFORMATION

Carcinogenicity of material.....	IARC has classified Titanium Dioxide as a group 2B carcinogen. Quartz (Crystalline Silica) is listed by IARC in Group 1 as a carcinogen. Xylene has been listed by IARC as a Group 3; not classifiable as to its carcinogenicity to humans. Ethylbenzene is classified as an A3 known animal carcinogen.
Reproductive effects.....	High level exposure to Xylene in some animal studies have been reported to cause health effects on the developing embryo/fetus. The relevance of this to humans is not known.
Mutagenicity.....	The data does not allow for an adequate assessment of the mutagenic effect.
Sensitizing capability of material.....	Ethylbenzene is a possible skin sensitizer.
Specific Target Organ Toxicity	May cause drowsiness or dizziness.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity.....	Product data not available.
Persistence and degradability.....	Product data not available.
Bioaccumulative potential.....	Product data not available.
Mobility in soil.....	Product data not available.
Other adverse effects.....	Do not allow to enter waters, waste water or soil.

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.
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SECTION 14: TRANSPORT INFORMATION

TDG Classification.....	UN1263 - PAINT - Class 3 - Packing Group II - This product meets limited quantity exemption when shipped in containers less than 5 litres.
DOT Classification (Road).....	UN1263 - PAINT - Class 3 - Packing Group II - Ltd Qty (1 Liter). Refer to 49CRF 172.101 for additional non-bulk packaging requirements.
IATA Classification (Air).....	UN1263 - PAINT - Class 3 - Packing Group II. Limited Quantity. Do not ship by air without checking appropriate IATA regulations.
IMDG Classification (Marine).....	UN1263 - PAINT - Class 3 - Packing Group II - EmS: F-E S-E. Limited Quantity. 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.....	On Domestic Substances List (DSL).
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 substances	None.
Section 311/312 - hazard categories.....	Immediate health, delayed health, fire hazard.
Section 313.....	Xylene. Ethylbenzene.
EPA hazardous air pollutants (HAPS) 40CFR63	Xylene. Ethylbenzene.
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 . (Carbon black - airborne, unbound particles of respirable size). (Silica, crystalline (airborne particles of respirable size). (Ethyl benzene). (Titanium dioxide - airborne, unbound particles of respirable size). 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.

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SECTION 16: OTHER INFORMATION

Date of the latest revision of the safety .. 2020-12-16
data sheet