

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

#### PF 599C WET LOOK ACRYLIC ENAMEL HARDENER PRODUCT:

#### **SECTION 01: IDENTIFICATION**

Initial supplier identifier..... Pro Form Products Ltd. 604 McGeachie Drive

Milton, Ontario L9T3Y5 Tel (905) 878-4990 Fax (905) 878-1189 PF 599C WET LOOK ACRYLIC ENAMEL HARDENER

Product identifier..... Paints. Coatings. Recommended use and restrictions on ..

Aliphatic polyisocyanate. Solvent blend. Health: 2 Fire: 4 Reactivity: 1. Chemical family.....

NFPA rating.....

HMIS..... H: 2 F: 4 R: 1.

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 \*\*. 24 hour emergency number:....

# **SECTION 02: HAZARD IDENTIFICATION**



Signal WordHazard Classification	DANGER. Flammable Liquid 2. Aspiration Toxicity 1. Skin Irritation — Category 2. Skin Sensitizer — Category 1. Eye Irritation — Category 2A. Acute Toxicity (Inhalation) — Category 4. Respiratory Sensitizer — Category 1. Specific Target Organ Toxicity — Single Exposure — Category 3. (respiratory system). (narcotic effects). (central nervous system). Carcinogenicity — Category 2. Reproductive Toxicity — Category 2.
Hazard Description	H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. 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. H351 This product contains ingredients that are
Prevention	suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. 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. 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	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 . P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor. P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P331 Do NOT induce vomiting. 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. 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. P312 Call a POISON CENTER/doctor if you feel unwell.
Storage	
Disposal Note	P501 Dispose all unused, waste or empty containers in accordance with local regulations.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS			
CHEMICAL NAME AND SYNONYMS	CAS#	WT. %	
Homopolymer of HDI	28182-81-2	15-40	
Homopolymer of IPDI	53880-05-0	10-30	
n-Butyl Acetate	123-86-4	7-13	
n-Amyl acetate	628-63-7	5-10	
Ethyl 3-Ethoxypropionate	763-69-9	5-10	
Methyl Isobutyl Ketone	108-10-1	5-10	
2-Propanol, 1-methoxy-, acetate	108-65-6	5-10	
Solvent Naphtha, Light Aromatics	64742-95-6	3-10	
Diisobutyl Ketone	108-83-8	1-5	
tert-Butyl acetate	540-88-5	1-5	
1,2,4-Trimethylbenzene	95-63-6	0.5-5	
Propyl Benzene	103-65-1	0.5-5	
1,3,5-Trimethylbenzene	108-67-8	0.5-5	
Isophorone Diisocyanate	4098-71-9	0.1-1	
Xylene	1330-20-7	0.1-1	
Cumene	98-82-8	0.1-1	
Hexamethylene -1,6-Diisocyanate	822-06-0	< 0.2	
< <the a<="" actual="" as="" concentration(s)="" td="" withheld=""><td>trade secret&gt;&gt; .</td><td></td><td></td></the>	trade secret>> .		

#### **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. Consult a physician if irritation continues.
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.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion	Rinse mouth with water. 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. The main hazard from ingestion is aspiration of the liquid into the lungs.
Most important symptoms and effects, whether acute or delayed	Harmful if swallowed, in contact with skin or if inhaled. Can cause skin sensitization. Causes skin and eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause respiratory irritation. May damage central nervous system. This product contains ingredients that may cause cancer. This product contains ingredients that are suspected of damaging fertility or the unborn child.
Additional information	Treat victims symptomatically. The main hazard from ingestion is aspiration of the liquid into the lungs producing chemical pneumonitis. 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. 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. Ingestion: treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. 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
Specific hazards arising from the .....hazardous product, such as the nature of any hazardous combustion products

Dry chemical. Carbon dioxide. Foam. In cases of larger fires, water spray should be used.

Do not use water in a jet. Flammable liquid. Thermal decomposition products are toxic. May include:. Oxides of carbon (CO, CO2). Oxides of nitrogen. Hydrogen cyanide. Isocyanates. Isocyanic acid. Dense black smoke. Other potentially toxic fumes.



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

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. During a fire, isocyanate vapours and other irritating, highly toxic gases may be generated by thermal decomposition or combustion.

## **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. Use non-sparking tools and equipment to pick up the spilled material.

If temporary control of isocvanate vapour is required, a blanket of protein foam may be

Methods and materials for containment and cleaning up

Major spills.....

Minor spills.....

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. Cover spill area with suitable absorbent material (e.g., sand, earth, sawdust, vermiculite, Oil-Dri, Kitty Litter, etc.). Saturate absorbent material with neutralizing solution. Recommended portion is ten parts neutralizing solution to one part spilled material. Suggested neutralization solution: 90% water + 5% concentrated ammonia + 5% detergent (dish soap). Add an additional layer of absorbent material. Use shovel to move absorbent material around to ensure that all spilled material comes in contact with the neutralizing solution. Shovel all absorbed material, including absorbent socks or spill pillows, into an appropriate salvage drum. Add further amounts of neutralizing solution. Allow to stand (covered loosely) for 48 to 72 hours, to allow any gases to escape.

Clean up.....

Decontaminate spill area with decontamination solution. Area can then be washed with soap and water. 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.

#### **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 skin and eye contact. Avoid breathing vapours or mist. Use adequate ventilation. Wear respiratory protection if material is heated, sprayed, used in confined space, or if exposure limit is exceeded. Keep container closed when not in use. Handle and open container with care. Do not reseal if contamination is suspected. 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 in a cool, dry and well ventilated area. Store in tightly closed containers to prevent moisture contamination. Avoid: Water, Amines, Strong bases, Alcohols, Copper alloys. Do not store above 50 deg C.

### SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

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INGREDIENTS	TWA ACG	IH TLV STEL	PEL OSH.	A PEL STEL	NIOSH REL
Homopolymer of HDI	5 mg/m3	Not established	5 mg/m3	Not established	5 mg/m3
Homopolymer of IPDI	Not established	Not established	Not established	Not established	Not established
n-Butyl Acetate	50 ppm	150 ppm	150 ppm	200 ppm	150 ppm / STEL 200 ppm
n-Amyl acetate	50 ppm/15 minutes	100 ppm	100 ppm	Not established	100 ppm
Ethyl 3-Ethoxypropionate	Not established	Not established	Not established	Not established	Not established
Methyl Isobutyl Ketone	50 ppm	75 ppm	100 ppm	Not established	50 ppm / STEL 75 ppm
2-Propanol, 1-methoxy-, acetate	50 ppm	75 ppm	Not established	Not established	Not established

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

INCREDIENTO		CGIH TLV		HA PEL	NIOSH
INGREDIENTS	TWA	STEL	PEL	STEL	REL
Solvent Naphtha, Light Aromatics	Not established	Not established	500 ppm (2000 mg/m3) TWA	Not established	350 mg/m3 TWA
Diisobutyl Ketone	25 ppm	Not established	50 ppm	Not established	25 ppm
tert-Butyl acetate	200 ppm	Not established	200 ppm	Not established	200 ppm
1,2,4-Trimethylbenzene	25 ppm	Not established	Not established	Not established	25 ppm
Propyl Benzene	Not established	Not established	Not established	Not established	Not established
1,3,5-Trimethylbenzene	Not established	Not established	Not established	Not established	25 ppm
Isophorone Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin
Xylene	50 ppm	150 ppm	100 ppm TWA	Not established	Not established
Cumene	50 ppm	Not established	50 ppm TWA	Not established	Not established
Hexamethylene -1,6-Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm
Personal protective equipment Respiratory/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. 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.			
		with pulmonary function to conditions, chronic bronch or sensitization should be diagnosed as sensitized to with asthmatic-type condit recurrant skin eczema or so Once a person is diagnose	est (FEC, FVC as a r nitis, other chronic re excluded from work o an isocyanate, no tions, chronic bronch sensitization should	ninimum). Persons with spiratory diseases or rec ing with isocyanates. Or further exposure can be p itis, other chronic respira be excluded from workin	asthmatic-type urring skin eczema ce a person is permitted. Persons tory diseases or g with isocyanates.
		permitted.			

# **SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance/Physical state Colour Odour Odour threshold (ppm) pH Melting / Freezing point (deg C) Initial boiling point / boiling range (deg C). Flash point (deg C), method Evaporation rate Upper flammable limit (% vol) Lower flammable limit (% vol) Vapour pressure (mm Hg)	
Vapour density (air=1)	
Vapoui ucioiiv (aii=1)	<b>≥</b> 1.



#### **SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

Relative Density (Specific Gravity)..... 1.060. Pounds / USG..... 8.85. Solubility.....Partition coefficient — n-octanol/water..... Reacts slowly with water to liberate CO2 gas. Not available. Auto ignition temperature (deg C)..... No data. Decomposition temperature..... Not available. 40 sec Zahn # 2. (as is) . 16.5 sec Zahn # 2 . (mixed). 1.83 lbs/USG. Viscosity..... VOC...... % Volatile by volume..... 30.26.

#### **SECTION 10: STABILITY AND REACTIVITY**

Avoid heat, sparks and flames. Contact with moisture, other materials that react with Reactivity ..... isocyanates, or temperatures above 177 C, may cause polymerization. Chemical stability..... Stable at normal temperatures and pressures. Possibility of hazardous reactions..... Contact with moisture, other materials that react with isocyanates, or temperatures above 177C, may cause polymerization. Conditions to avoid, including static ....... Avoid heat, spark, open flames. Electrostatic charge. discharge, shock or vibration Incompatible materails..... Water, Amines, Strong bases, Alcohols, Copper alloys. Strong oxidizing agents. Strong Hazardous decomposition products...... See hazardous combustion products section 5.

#### SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS		LC50	LD50
Homopolymer of HDI		390-453 mg/m3 rat 4 hours	> 5,000 mg/kg rat oral; > 5,000 mg/kg rabbit dermal
Homopolymer of IPDI		Not Available	Not Available
n-Butyl Acetate		390 ppm (4 hr.)	10768 mg/kg (rat oral) 17600 mg/kg (rabbit dermal)
n-Amyl acetate		>976 ppm 4 hours rat	6500 mg/kg rat oral 8359 mg/kg rabbit dermal
Ethyl 3-Ethoxypropionate		>998 ppm 6 hours	4,309 mg/kg rat oral 4,080 mg/kg rabbit dermal
Methyl Isobutyl Ketone		8.2 - 16.4 mg/L 4 hours rat	2080 mg/kg rat oral >16,000 mg/kg rabbit dermal
2-Propanol, 1-methoxy-, acetate		Not Available	8,532 mg/kg rat oral 5,000 mg/kg dermal rabbit
Solvent Naphtha, Light Aromatics		5.2 mg/L 4 hours, rat 3400 ppm 4 hours, rat	>5,000 mg/kg rat oral >2,000 mg/kg rabbit dermal
Diisobutyl Ketone		>2,300 ppm 4 hours	5,285 mg/kg rat oral >2,000 mg/kg rat dermal
tert-Butyl acetate		>2,230 mg/m3 4 hours rat	4,100 mg/kg rat oral >2,000 mg/kg rabbit dermal
1,2,4-Trimethylbenzene		>2,000 ppm 48 hours rat	3,280 mg/kg rat oral
Propyl Benzene		Not Available	6,040 mg/kg rat oral
1,3,5-Trimethylbenzene		Not Available	Not Available
Isophorone Diisocyanate		123 mg/m3 4 hours rat	>1,000 mg/kg rat oral 1,060 mg/kg rat dermal
Xylene		6350 ppm 4 hours rat	>3523 mg/kg rat oral
Cumene		No Data	50 PPM, SKIN
Hexamethylene -1,6-Diisocyanate		22 ppm 4 hours rat	738 mg/kg rat oral 593 mg/kg rabbit dermal
Acute Toxicity EstimateRoute of exposureEffects of acute exposure	Route of exposure Eye contact. Skin contact. Inhalation. Skin absorption.		

respiratory system. May be harmful if absorbed through the skin. Can result in irritation in

### **SECTION 11: TOXICOLOGICAL INFORMATION**

Effects of acute exposure..... the digestive tract. Aspiration of liquid into lungs can cause chemical pneumonitis. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea. Breathing of high vapour concentrations may cause anesthetic effects and serious health effects.

Effects of chronic exposure..... 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. 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. Sensitization can be permanent. Reports have associated repeated or prolonged overexposure to solvents with permanent brain and nervous system

damage. Prolonged or repeated exposure may cause lung damage, including a decréase in lung function.

May be harmful if absorbed through the skin. Skin absorption.....

Isocyanates are known to cause skin and respiratory sensitization in humans. Animal tests Sensitizing capability of material..... have indicated that respiratory sensitization can result from skin contact with diisocyanates.

Methyl Isobutyl Ketone is possibly carcinogenic to humans (IARC Group 2B). Cumene is listed by IARC in Group 2B as a possible carcinogen. . Commercial xylene is a mixture Carcinogenicity of material..... containing varying percentages of isomers of xylene (ortho-xylene, meta-xylene, and

para-xylene), ethylbenzene, and certain impurities (eg, trimethylbenzene, phenol, thiophene, pyridine, toluene). , pseudocumene, benzene, nonaromatic hydrocarbons). Xylene has been classified by The Commission on Health and Safety as causing

Reproductive effects.....

reproductive effects. .

Solvent Naphtha is classified as a possible mutagen . Mutagenicity.....

Specific Target Organ Toxicity ..... May cause respiratory irritation. May cause drowsiness or dizziness. Damage to central

nervous system.

#### SECTION 12: ECOLOGICAL INFORMATION

Environmental..... No product data. 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

40CFR63

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..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - This product meets the Limited Quantity exemption when packaged in containers less than 5 liters. UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - Ltd Qty (1 litre). DOT Classification (Road)..... Refer to 49CRF 172.101 for additional non-bulk packaging requirements. UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II. Limited Quantity. Do not ship by air without checking appropriate IATA regulations.
UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - EmS: F-E S-E. Limited Quantity. Check IMDG regulations for limited quantity exemptions. IATA Classification (Air)..... IMDG Classification (Marine)..... 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**

Contains ingredient(s) not on the DSL. All components are listed. CEPA status.....TSCA inventory status..... This product is considered hazardous under the OSHA Hazard Communication Standard. OSHA..... SARA Title III Isophorone Diisocyanate.

Section 302 - extremely hazardous ........ substances Section 311/312 - hazard categories.......

Immediate health, delayed health, fire hazard. 1,2,4-Trimethylbenzene. Glycol ethers. Methyl Isobutyl Ketone. Xylene. Section 313.....

EPA hazardous air pollutants (HAPS) ..... Cumene. Ethylbenzene. Glycol ethers. Hexamethylene diisocyanate. Methanol. Methyl California Proposition 65.....

Isobutyl Ketone. Xylene.
\*\*\*! WARNING: This product can expose you to chemicals including [see below], which are known to the State of California to cause birth defects or other reproductive harm. (Benzene (Dev)). (Methanol). (Methyl Isobutyl Ketone (D)). \*\*\*! WARNING: This product can expose you to chemicals including [see below], which are known to the State of California to cause cancer . (Benzene). (Cumene). (Ethyl benzene). (Methyl Isobutyl Ketone (C)). For more information, go to www.P65Warnings.ca.gov.



2019-07-19

### **SECTION 16: OTHER INFORMATION**

REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com. Prepared by: ..... 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 ... data sheet