



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

**PRODUCT: PF 147 LIQUID HARDENER 2 oz**

### SECTION 01: IDENTIFICATION

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

Product identifier..... PF 147 LIQUID HARDENER 2 oz

Recommended use and restrictions on .. Accelerator and activator. This product should not be used for any other purpose other  
use than the ones described in this section.

Chemical family..... Organic peroxide.

NFPA rating..... Health: 3 Fire: 1 Reactivity: 2.

HMIS..... H: 3 F: 1 R: 2.

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 \*\*.

### SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER.

Hazard Classification..... Organic Peroxides Type D. Acute Toxicity 4. Skin corrosion 1. Eye Irritant 1.

Hazard Description..... H242 Heating may cause a fire. H302 Harmful if swallowed. H314 Causes severe skin  
burns and eye damage. H318 Causes serious eye damage.

Prevention..... P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking. P234  
Keep only in original packaging. P235 Keep cool. P240 Ground and bond container and  
receiving equipment. P280 Wear protective gloves and eye protection. P264 Wash  
thoroughly after handling. P270 Do not eat drink or smoke while using this product. P260  
Do not breathe mist, vapours, or spray.

Response ..... P301 + P330 + P331 If Swallowed: Rinse mouth. Do NOT induce vomiting. P310 -  
Immediately call your local poison control centre. P303 + P361 + P353 If on skin or in hair:  
take off all contaminated clothing immediately. Rinse thoroughly with water and use safety  
shower . P363 - Wash contaminated clothing before reuse. 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. P321 - For specific treatment see  
section 4 on this SDS.

Storage..... P403 Store in a well ventilated area. P411 Store at temperatures not exceeding 60°C /  
140°F. P420 Store separately. P405 Store locked up.

Disposal..... 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. %
Methyl ethyl ketone peroxide	1338-23-4	30-35
Methyl Ethyl Ketone	78-93-3	5-10
Hydrogen peroxide	7722-84-1	5-10

### 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. Get medical attention immediately.

Skin contact..... Remove all contaminated clothing and immediately wash the exposed areas with copious  
amounts of water for a minimum of 30 minutes or up to 60 minutes for critical body areas.  
Obtain medical attention immediately.

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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. If ingestion is suspected, contact physician or poison control center immediately. 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.
Additional information.....	Treat victims symptomatically. The main hazard from ingestion is aspiration of the liquid into the lungs producing chemical pneumonitis. 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, CO <sub>2</sub> , dry chemical. Water fog. Do not use water in a jet.
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion products	Oxides of carbon (CO, CO <sub>2</sub> ). Ethane and Methane.
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. Fight fire like a fuel oil fire. Cool fire-exposed containers with cold water spray. 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.....	Keep away from heat, sparks and flames. Avoid breathing vapours and skin contact. Remove sources of ignition if combustible or flammable vapours may be present and ventilate area. Evacuate all non-essential personnel. Use a self contained breathing apparatus. Contain the spill. Absorb with earth, sand, or another dry inert material. Scrape or shovel into containers. 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 material from contaminating soil and from entering sewers, waterways or low areas.
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**SECTION 07: HANDLING AND STORAGE**

Precautions for safe handling.....	Keep away from heat, sparks, and open flame. Ground handling equipment. Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Always adopt precautionary measures against build-up of static which may arise from appliances, handling and the containers in which product is packed. 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. Keep container closed when not in use. Store in a cool dry place away from organic materials.

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

INGREDIENTS	TWA	ACGIH TLV STEL	OSHA PEL STEL	REL	NIOSH
Methyl ethyl ketone peroxide	0.2 ppm (ceiling)	Not Established	Not Established	Not Established	Not Established
Methyl Ethyl Ketone	200 ppm CA ON: 200ppm (TWA), 300ppm (STEL)	300 ppm	200 ppm	Not established	200 ppm TWA
Hydrogen peroxide	1 ppm	Not Established	1 ppm TWA; 1.4 mg/m <sup>3</sup> TWA	Not Established	1 ppm TWA; 1.4 mg/m <sup>3</sup> TWA; 75 ppm IDLH
Eye/type.....	Liquid chemical goggles. Chemical safety goggles and full faceshield if a splash hazard exists.				
Gloves/ type.....	Chemical resistant gloves.				
Clothing/type.....	Wear adequate protective clothes. Wear long sleeves and trousers to prevent dermal exposure.				
Footwear/type.....	Safety boots per local regulations.				
Respiratory/type.....	Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.				

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Other/type..... Emergency shower should be in close proximity. Eye wash facility should be close in proximity.  
 Appropriate engineering controls..... Local exhaust at points of emission. Use local exhaust or general room ventilation sufficient to prevent overexposure.

**SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance/Physical state..... Liquid.  
 Colour..... Colourless.  
 Odour..... Slight.  
 Odour threshold (ppm)..... Not available.  
 Vapour pressure (mm Hg)..... No data.  
 Vapour density (air=1)..... No data.  
 pH..... No data.  
 Relative Density (Specific Gravity)..... 8.33 lb/usg - 1.00 g/mL.  
 Melting / Freezing point (deg C)..... No data.  
 Solubility..... Partially in water.  
 Initial boiling point / boiling range (deg C). No data.  
 Evaporation rate..... No data.  
 Flash point (deg C), method..... 94.  
 Auto ignition temperature (deg C)..... No data.  
 Upper flammable limit (% vol)..... No data.  
 Lower flammable limit (% vol)..... No data.  
 Partition coefficient — n-octanol/water..... Not available.  
 VOC (less water)..... No data.  
 Viscosity..... No data.

**SECTION 10: STABILITY AND REACTIVITY**

Chemical stability..... Stable at normal temperatures and pressures.  
 Reactivity ..... Avoid open flames, sparks, heat, electrical and static discharge, storage at high temperatures.  
 Conditions to avoid, including static ..... Strong oxidizers. Strong bases. Amines. Copper.  
 discharge, shock or vibration  
 Hazardous decomposition products..... Oxides of carbon (CO,CO2).  
 Possibility of hazardous reactions..... Hazardous polymerization will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
Methyl ethyl ketone peroxide	200 ppm (4hr, rat) 170 mg/l (4hr, mouse)	6.86 ml/kg (rat, oral) 500 mg/kg (rabbit, dermal)
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)
Hydrogen peroxide	No data	No data
Acute Toxicity Estimate (ATE).....	ATE (mix) oral: 1429 mg/kg. ATE (mix) inhalation vapour: 220 mg/L .	
Route of exposure.....	Eye contact. Skin contact. Inhalation. Ingestion.	
Effects of acute exposure.....	Corrosive to eyes. Contact with eyes can cause severe irritation. May cause eye damage. Contact with skin can cause severe irritation. Inhalation of vapours can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache, possible unconsciousness, and asphyxiation. If ingested, this product may be absorbed and result in gastrointestinal irritation, nausea, vomiting, and diarrhea. May cause burns of the mouth, throat, esophagus, and stomach. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.	
Effects of chronic exposure.....	Prolonged or repeated overexposure can cause damage to eyes, skin, and mucous membranes. May aggravate pre-existing skin and eye disorders. May cause respiratory damage. Extended exposure to MEKP can cause liver and kidney damage.	
Carcinogenicity of material.....	IARC has classified Hydrogen Peroxide as a Group 3 - Not classifiable as to its carcinogenicity to humans.	
Reproductive effects.....	No known reproductive effects.	

**PRODUCT: PF 147 LIQUID HARDENER 2 oz****SECTION 12: ECOLOGICAL INFORMATION**

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

**SECTION 13: DISPOSAL CONSIDERATIONS**

Information on safe handling for disposal and methods of disposal, including any contaminated packaging . Empty containers must be handled with care due to product residue. Dispose of as an industrial waste in a manner acceptable to good waste management practice and in accordance with applicable local, provincial/State or federal regulations.

**SECTION 14: TRANSPORT INFORMATION**

TDG Classification..... UN3105 - ORGANIC PEROXIDE TYPE D, LIQUID, Class 5.2, PGII. Limited Quantity  
 Index: 0.125 L.  
 DOT Classification (Road)..... Organic Peroxide Type D, Liquid (Methyl Ethyl Ketone Peroxide) - UN 3105, Class 5.2, PG II.  
 IATA Classification (Air)..... Organic Peroxide Type D, Liquid (Methyl Ethyl Ketone Peroxide) - Class 5.2 - UN3105 - PGII.  
 IMDG Classification (Marine)..... Organic Peroxide Type D, Liquid (Methyl Ethyl Ketone Peroxide) - Class 5.2 - UN3105 - PGII.  
 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 ..... Hydrogen Peroxide (CAS 7722-84-1).  
 Section 311/312 - hazard categories..... Immediate health, delayed health. Fire hazard. Pressure. Reactive.  
 Section 313..... None.  
 EPA hazardous air pollutants (HAPS) 40CFR63 ..... None.  
 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.  
 Review Date:..... 2022-11-30.  
 Date of the latest revision of the safety data sheet .. 2017-05-11