



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

PRODUCT: 12392 FAST ACTIVATOR FOR 12390

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..... 12392 FAST ACTIVATOR FOR 12390

Recommended use and restrictions on .. Paints. Accelerator and activator.
use

Chemical family..... Mixture.

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

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

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..... Flammable Liquid 2. Skin Sensitizer — Category 1. Eye Irritant 2. Acute Toxicity (Inhalation) — Category 4. Respiratory Sensitizer — Category 1. Specific Target Organ Toxicity — Single Exposure — Category 3. (respiratory system). Carcinogenicity — Category 2. Reproductive Toxicity — Category 2.

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. H335 May cause respiratory irritation. H351 This product contains ingredients that are suspected of causing 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. P280 Wear protective gloves and eye protection. P261 Avoid breathing mists, vapours and sprays. P284 In case of inadequate ventilation wear respiratory protection. P271 Use only outdoors or in a well ventilated area. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace.

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. P333 + P313 If skin irritation or rash occurs, get medical advice/attention. 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. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor. P321 - For specific treatment see section 4 on this SDS.

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.

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

PRODUCT: 12392 FAST ACTIVATOR FOR 12390**SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Propylene Glycol Monomethyl Ether Acetate	108-65-6	35-45
Homopolymer of HDI	28182-81-2	15-25
Ethyl Acetate	141-78-6	10-20
n-Butyl Acetate	123-86-4	10-20
Homopolymer of IPDI	53880-05-0	3-7
Methyl Isobutyl Ketone	108-10-1	1-3
n-Amyl acetate	628-63-7	1-3
Ethyl 3-Ethoxypropionate	763-69-9	1-3
Diisobutyl Ketone	108-83-8	<2
1,2,4-Trimethylbenzene	95-63-6	<2
Propyl Benzene	103-65-1	<2
1,3,5-Trimethylbenzene	108-67-8	<2
Solvent Naphtha, Light Aromatics	64742-95-6	0.5-1.5
Xylene	1330-20-7	<0.3
Cumene	98-82-8	<0.3
Isophorone Diisocyanate	4098-71-9	<0.2

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. 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.....	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, obtain medical attention.
Ingestion.....	If swallowed, drink plenty of water. Wash out mouth repeatedly. 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. Get medical attention.
Most important symptoms and effects, whether acute or delayed	Harmful if swallowed, in contact with skin or if inhaled. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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	Dry chemical. Carbon dioxide. Foam. In cases of larger fires, water spray should be used. 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 ₂). Oxides of nitrogen. Smoke. Hydrogen cyanide. Isocyanates. Other potentially toxic fumes.
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.

PRODUCT: 12392 FAST ACTIVATOR FOR 12390**SECTION 06: ACCIDENTAL RELEASE MEASURES**

Leak/spill.....	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. Eliminate all sources of ignition. 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.
Major spills.....	If temporary control of isocyanate vapour is required, a blanket of protein foam may be 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.
Minor spills.....	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.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....	Ensure that equipment is properly bonded and grounded during filling and transferring as product may become electrostatically charged. Use adequate ventilation. Do not breathe vapours, mist or dust. Wear respiratory protection if material is heated, sprayed, used in confined space, or if exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odour) are not adequate to prevent chronic overexposure from inhalation. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed vapour or spray mist. Avoid skin and eye contact. Wash thoroughly after handling. Decomposition products are highly toxic and irritating. Employee education and training are important.
Conditions for safe storage, including any incompatibilities	Store in tightly closed containers to prevent moisture contamination. Keep away from heat, sparks, and open flames. Do not resealed if contamination is suspected. Exposure to vapours of heated isocyanates can be extremely dangerous.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL	NIOSH
Propylene Glycol Monomethyl Ether Acetate	Not established	Not established	Not established	Not established	Not established	Not established
Homopolymer of HDI	5 mg/m3 Supplier: 0.5 mg/m3 (TWA)	Not established	5 mg/m3	Not established	5 mg/m3	
Ethyl Acetate	400 ppm CA ON: 400 ppm (TWA)	Not established	400 ppm	Not established	400 ppm	
n-Butyl Acetate	50 ppm CA ON: 50ppm (TWA), 150ppm (STEL)	150 ppm	150 ppm	200 ppm	150 ppm / STEL 200 ppm	
Homopolymer of IPDI	Not established	Not established	Not established	Not established	Not established	Not established
Methyl Isobutyl Ketone	50 ppm ON: 20 ppm (TWA), 75 ppm (STEL)	75 ppm	100 ppm	Not established	50 ppm / STEL 75 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	Not established
Diisobutyl Ketone	25 ppm	Not established	50 ppm	Not established	25 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	Not established
1,3,5-Trimethylbenzene	Not established	Not established	Not established	Not established	25 ppm	

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SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Solvent Naphtha, Light Aromatics	Not established	Not established	500 ppm (2000 mg/m ³) TWA	Not established	350 mg/m ³ TWA
Xylene	50 ppm CA ON: 100ppm (TWA); 150ppm (STEL)	150 ppm	100 ppm TWA	Not established	Not established
Cumene	50 ppm	Not established	50 ppm TWA	Not established	Not established
Isophorone Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin
Personal Protective Equipment					
Eye/type.....	Chemical safety goggles. Chemical safety goggles and full faceshield if a splash hazard exists. Contact lenses should not be worn when working with this chemical.				
Respiratory/type.....	Whenever concentrations of isocyanates exceed the exposure limit or are not known, respiratory protection must be worn. A positive pressure, supplied-air respirator or a self-contained breathing apparatus is recommended. At least an air-purifying respirator equipped with an organic vapour cartridge and particulate pre-filters must be worn. However, this should be permitted only for short periods of time (< 1 hour) at relatively low concentrations (at or near the exposure limit). 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. Do not exceed the use limits of the respirator.				
Gloves/ type.....	Chemical resistant gloves. Butyl rubber. Neoprene. Nitrile rubber. Practice good hygiene, wash thoroughly before handling any food.				
Clothing/type.....	Wear adequate protective clothes. Wear long sleeves and trousers to prevent dermal exposure.				
Footwear/type.....	Safety boots per local regulations.				
Other/type.....	Eye wash facility and emergency shower should be in close proximity. Educate and train employees on the safe use and handling of the product.				
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.				
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. These should include preemployment and periodic medical examinations with pulmonary function test (fev, fvc as a minimum). Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent 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

Appearance/Physical state.....	Liquid.
Colour.....	Light yellow.
Odour.....	Ketone odour.
Odour threshold (ppm).....	Not available.
Vapour pressure (mm Hg).....	Not available.
Vapour density (air=1).....	>1.
pH.....	No data.
Relative Density (Specific Gravity).....	8.28 lb/usg - 0.99 g/mL.
Melting / Freezing point (deg C).....	Not available.
Solubility.....	Reacts with water.
Initial boiling point / boiling range (deg C).....	No data.
Evaporation rate.....	Not available.
Flash point (deg C), method.....	-4.0 °C. (estimated).
Auto ignition temperature (deg C).....	No data.
Upper flammable limit (% vol).....	10.6.
Lower flammable limit (% vol).....	1.0.
Partition coefficient — n-octanol/water.....	Not available.
% Volatile by volume.....	70.43.
VOC (less water).....	5.45 lbs/USG.
Viscosity.....	No data.

PRODUCT: 12392 FAST ACTIVATOR FOR 12390**SECTION 10: STABILITY AND REACTIVITY**

Chemical stability.....	Stable at normal temperatures and pressures.
Reactivity	Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong oxidizing agents. Contact with water liberates toxic gas.
Possibility of hazardous reactions.....	Contact with moisture or other materials that react with isocyanates may cause polymerization.
Conditions to avoid, including static discharge, shock or vibration	Water, amines, strong bases, alcohols. Copper alloys.
Hazardous decomposition products.....	See hazardous combustion products section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
Propylene Glycol Monomethyl Ether Acetate	Not Available	8,532 mg/kg (rat oral) >5,000 mg/kg (rabbit dermal)
Homopolymer of HDI	390-453 mg/m ³ rat 4 hours	> 5,000 mg/kg (rat, oral); > 5,000 mg/kg (rabbit, dermal)
Ethyl Acetate	16,000 ppm 6 hours rat	5,600 mg/kg (rat oral)
n-Butyl Acetate	>33 mg/L vapour, 5.2 mg/L (rat) dust/mist	10760 mg/kg (rat, oral) 14112 mg/kg (rabbit, dermal)
Homopolymer of IPDI	Not Available	Not Available
Methyl Isobutyl Ketone	8.2 - 16.4 mg/L 4 hours rat	2080 mg/kg (rat oral) >16,000 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
Diisobutyl Ketone	>2,300 ppm 4 hours	5,285 mg/kg (rat oral) >2000 mg/kg (rat 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
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)
Xylene	6350 ppm 4 hours rat	>3523 mg/kg rat oral
Cumene	No Data	50 PPM, SKIN
Isophorone Diisocyanate	123 mg/m ³ 4 hours rat	>1,000 mg/kg (rat oral) 1,060 mg/kg (rat dermal)

Route of exposure.....	Eye contact. Skin contact. Inhalation.
Effects of acute exposure.....	SKIN: Irritant. Can cause reddening, itching and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration. EYE: Product liquid, aerosols or vapours are irritating. Can cause tearing, reddening and swelling. May cause temporary corneal injury. INHALATION: 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, difficulty breathing and reduced pulmonary functioning. Persons with pre-existing, nonspecific bronchial hyperactivity can respond to concentrations below the TLV with similar symptoms as well as asthma attack. These symptoms can be delayed up to several hours after exposure. Effects are usually reversible. INGESTION: May cause irritation. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.
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. Sensitization can be permanent. Prolonged or repeated exposure may cause lung damage, including a decrease in lung function. Prolonged vapour contact may cause conjunctivitis. Prolonged skin contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, sensitization. Chronic exposure to organic solvents may cause permanent brain and nervous system damage.

PRODUCT: 12392 FAST ACTIVATOR FOR 12390**SECTION 11: TOXICOLOGICAL INFORMATION**

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.

Carcinogenicity of material..... Cumene is listed by IARC in Group 2B as a possible carcinogen. . Methyl Isobutyl Ketone is possibly carcinogenic to humans (IARC Group 2B).

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.

SECTION 12: ECOLOGICAL INFORMATION

Environmental..... 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 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..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - This product meets the Limited Quantity exemption when packaged in containers less than 5 liters.

DOT Classification (Road)..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - Ltd Qty (1 litre). Refer to 49CFR 172.101 for additional non-bulk packaging requirements.

IATA Classification (Air)..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II. Limited Quantity. Do not ship by air without checking appropriate IATA regulations.

IMDG Classification (Marine)..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - EmS: F-E S-E. Limited Quantity.

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 Isophorone Diisocyanate.
substances

Section 311/312 - hazard categories..... Immediate health, delayed health, fire hazard.
Section 313..... Methyl Isobutyl Ketone. Hexamethylene diisocyanate.

EPA hazardous air pollutants (HAPS) Ethyl acetate. Hexamethylene diisocyanate. Methyl Isobutyl Ketone. Xylene.
40CFR63

California Proposition 65..... *WARNING: This product contains a chemical known to the State of California to cause cancer. *WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

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 .. 2017-11-08
data sheet