



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

PRODUCT: PF 12262 SUPER EXPRESS HARDENER 1L

SECTION 01: IDENTIFICATION

Initial supplier identifier..... Wyatt Machine Tools (Rupes) NZ Limited
388 Church Street, Penrose
Auckland, New Zealand
PH: (09) 525 1000
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Product identifier..... PF 12262 SUPER EXPRESS HARDENER 1L

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

Chemical family..... Mixture.

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

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

24 hour emergency number..... NZ Emergency 0800 992 881 (0800WYATT1).

SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER.

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

Hazard Description..... H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation.

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. P261 Avoid breathing mists, vapours and sprays. 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. 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..... P235 Keep cool. P403 + P233 Store in a well ventilated area. 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.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Homopolymer of HDI	28182-81-2	40-70
n-Butyl Acetate	123-86-4	30-60
Hexamethylene -1,6-Diisocyanate	822-06-0	0.1-1

PRODUCT: PF 12262 SUPER EXPRESS HARDENER 1L**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. Obtain medical attention.
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. Use a polyglycol based cleanser if available. If irritation persists, seek medical attention. Wash clothing before reuse.
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.
Most important symptoms and effects, whether acute or delayed	Harmful if swallowed, in contact with skin or if inhaled. Can cause skin sensitization. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause mild skin irritation. May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation.
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. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

SECTION 05: FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media	"Alcohol" foam, CO ₂ , dry chemical. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Use cold water spray to cool exposed containers to minimize risk of rupture. 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. Hydrogen cyanide. Thermal decomposition may release isocyanate vapors.
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

Leak/spill.....	Ventilate. Eliminate all sources of ignition. Evacuate all non-essential personnel. Avoid all personal contact. Contain the spill. Prevent runoff into drains, sewers, and other waterways. Absorb with earth, sand, or another dry inert material. Shovel into suitable unsealed containers, transport to well-ventilated area (outside) and treat with neutralizing solution: mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%); or water (90%), concentrated ammonia (3-8%) and detergent (2%). 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.
Minor spills.....	Absorb isocyanates with sawdust or other absorbent. Decontamination Solution: Mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), or; water (90%), concentrated ammonia (3-8%) and detergent (2%). Add about 10 parts of decontamination solution per part of isocyanate. Allow to stand in the open air for 7 to 14 days prior to disposal.
Clean up.....	Decontaminate floor with decontamination solution, letting stand for at least 15 minutes.

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. Keep container closed when not in use. Store away from oxidizing and reducing materials. Store away from sunlight. Do not store above 35 deg c.

PRODUCT: PF 12262 SUPER EXPRESS HARDENER 1L**SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

INGREDIENTS	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
Homopolymer of HDI	5 mg/m3	Not established	5 mg/m3	Not established	5 mg/m3
n-Butyl Acetate	50 ppm	150 ppm	150 ppm	200 ppm	150 ppm / STEL 200 ppm
Hexamethylene -1,6-Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm
Respiratory/type.....	Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits.				
Eye/type.....	Liquid chemical goggles. Chemical safety goggles and full faceshield if a splash hazard exists.				
Gloves/ type.....	Chemical resistant gloves. Nitrile rubber. Butyl rubber.				
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.				
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.				

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state.....	Liquid.
Colour.....	Light yellow.
Odour.....	Solvent odour. Fruity characteristic.
Odour threshold (ppm).....	Not available.
Vapour pressure (mm Hg).....	< . 11.3 mmHg @ 25°C.
Vapour density (air=1).....	>1.
pH.....	Not applicable.
Relative Density (Specific Gravity).....	1.033 - 8.62 lb/gal.
Melting / Freezing point (deg C).....	Not available.
Solubility.....	Negligible. Reacts slowly with water to liberate CO2 gas.
Initial boiling point / boiling range (deg C).....	> 100° C.
Evaporation rate.....	Not available.
Flash point (deg C), method.....	22C. (estimate; lowest flash point ingredient).
Auto ignition temperature (deg C).....	>370.
Upper flammable limit (% vol).....	7.5.
Lower flammable limit (% vol).....	1.2.
Partition coefficient — n-octanol/water.....	Not available.
% Volatile by weight.....	37.9.
Decomposition temperature.....	Not available.
VOC.....	3.27 lb/gal - 391.8 g/L.
Viscosity.....	19.24 Zahn # 2.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Avoid heat, sparks and flames. Contact with moisture, other materials that react with isocyanates, or temperatures above 177 C, may cause polymerization.
Chemical stability.....	Stable at normal temperatures and pressures.
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	Keep away from heat. Incompatible with strong oxidizers. Water, amines, strong bases, alcohols. Copper. Alumina. Silica gel. Peroxides. Chromium trioxide. Perchloric acid.
Hazardous decomposition products.....	By fire: Oxides of nitrogen. Oxides of carbon (CO,CO2). Isocyanates. Dense black smoke.

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
n-Butyl Acetate	390 ppm (4 hr.)	10768 mg/kg (rat oral) 17600 mg/kg (rabbit dermal)

PRODUCT: PF 12262 SUPER EXPRESS HARDENER 1L**SECTION 11: TOXICOLOGICAL INFORMATION**

INGREDIENTS	LC50	LD50
Hexamethylene -1,6-Diisocyanate	22 ppm 4 hours rat	738 mg/kg rat oral 593 mg/kg rabbit dermal
Route of exposure.....	Eye contact. Skin contact. Inhalation.	
Effects of acute exposure.....	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. Can be irritating to eyes and skin.	
Effects of chronic exposure.....	Breathing high concentrations of vapour may cause anesthetic effects and serious health effects. Contains an ingredient which caused reproductive effects in rats after repeated application of large amounts to skin. These effects have not been reported in humans. Prolonged or repeated exposure may result in skin sensitization. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal .	
Skin absorption.....	Chronic skin exposure to solvents may cause effects similar to those identified under chronic inhalation.	
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.....	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.	
Specific Target Organ Toxicity	May cause respiratory irritation.	

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. This material and its container must be disposed of as hazardous waste. Avoid release to the environment.
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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. 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.....	Hexamethylene diisocyanate.
EPA hazardous air pollutants (HAPS) 40CFR63	Hexamethylene diisocyanate.
California Proposition 65.....	This product does not contain any chemical(s) known to the State of California to cause cancer or reproductive toxicity.
(NZ) Statement.....	This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017.
(NZ) HSNO Classifications.....	3.1B. 6.5B. 6.1D. 6.5A. 6.1E. 6.9B.
(NZ) HSNO Group Standard.....	Not assigned.

PRODUCT: PF 12262 SUPER EXPRESS HARDENER 1L**SECTION 16: OTHER INFORMATION**

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