

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

PRODUCT: PF 13402 2K HIGH BUILD PRIMER ACTIVATOR 1L

SECTION 01: IDENTIFICATION

Initial supplier identifier...... Wyatt Machine Tools (Rupes) NZ Limited

388 Church Street, Penrose Auckland, New Zealand PH: (09) 525 1000 FAX: (09) 525 1009

Product identifier...... PF 13402 2K HIGH BUILD PRIMER ACTIVATOR 1L

Paints. Accelerator and activator.

Chemical family...... Mixture.

Recommended use and restrictions on ...

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

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

SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER. Flammable Liquid 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). Carcinogenicity — Category 2. Reproductive Toxicity — Category 2. 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 Hazard Classification..... Hazard Description..... 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. P201 Obtain special instructions before use. P202 Do not handle this product until all Prevention..... 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 . 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. P308 + P313 If exposed or concerned, get medical advice/attention. P321 - For specific treatment see section 4 on this SDS P405 Store locked up. P235 Keep cool. P403 + P233 Store in a well ventilated area. Keep Storage..... container tightly closed. P501 Dispose all unused, waste or empty containers in accordance with local regulations. Disposal..... This product mixture has been classified based on its ingredients. Note

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS				
CHEMICAL NAME AND SYNONYMS	CAS#	WT. %		
tert-Butyl acetate	540-88-5	30-50		
Homopolymer of HDI	28182-81-2	10-30		
n-Butyl Acetate	123-86-4	10-20		
Ethyl Acetate	141-78-6	6-11		
Homopolymer of IPDI	53880-05-0	1-5		
Ethyl 3-Ethoxypropionate	763-69-9	1-5		
n-Amyl acetate	628-63-7	1-5		
Methyl Isobutyl Ketone	108-10-1	1-5		
Solvent Naphtha, Light Aromatics	64742-95-6	0.1-1		
Propylene Glycol Monomethyl Ether Acetate	108-65-6	0.1-1		
Diisobutyl Ketone	108-83-8	0.1-1		
Propyl Benzene	103-65-1	0.1-1		
1,2,4-Trimethylbenzene	95-63-6	0.1-1		
1,3,5-Trimethylbenzene	108-67-8	0.1-1		
Xylene	1330-20-7	<0.3		
Cumene	98-82-8	<0.2		
Hexamethylene -1,6-Diisocyanate	822-06-0	<0.1		
Isophorone Diisocyanate	4098-71-9	<0.1		

SECTION 04: FIRST-AID MEASURES

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.
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is
difficult, give oxygen, obtain medical attention. 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. Rinse mouth with water. Do not induce vomiting.
Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye irritation. Can cause skin sensitization. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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

SECTION 05: FIRE-FIGHTING MEASURES

safety data sheet.

Suitable and unsuitable extinguishing media

Specific hazards arising from thehazardous product, such as the nature of any hazardous combustion products Special protective equipment andprecautions for fire-fighters

Dry chemical. Carbon dioxide. Foam. In cases of larger fires, water spray should be used. Do not use water in a jet.

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

Oxides of carbon (CO, CO2). Oxides of nitrogen. Smoke. Hydrogen cyanide. Isocyanates. Other potentially toxic fumes.

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. Avoid all personal contact. Evacuate all non-essential personnel. 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.
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.
Minor spills	Large quantities may be pumped into closed, but not sealed, containers for disposal. Absorb isocyanates with sawdust or other absorbent. Pour decontamination solution over spill area and allow to react for at least 10 minutes. Shovel into suitable containers and add further amounts of decontamination solution. Add about 10 parts of decontamination solution per part of isocyanate. Decontamination solution: Decontamination Solution: Mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), or; water (90%), concentrated ammonia (3-8%) and detergent (2%). Allow to stand uncovered for 72 hours to let carbon dioxide escape.
Clean up	Decontaminate floor with decontamination solution, letting stand for at least 15 minutes.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....

Do not breathe vapours, mist or dust. Use adequate ventilation. 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. Ensure that equipment is properly bonded and grounded during filling and transferring as product may become electrostatically charged. Employee education and training are important.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks, and open flames. Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Exposure to vapours of heated isocyanates can be extremely dangerous. Do not store above 50 deg C.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA ACG	IH TLV STEL	OSH. PEL	A PEL STEL	NIOSH REL
tert-Butyl acetate	200 ppm	Not established	200 ppm	Not established	200 ppm
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
Ethyl Acetate	400 ppm	Not established	400 ppm	Not established	400 ppm
Homopolymer of IPDI	Not established	Not established	Not established	Not established	Not established
Ethyl 3-Ethoxypropionate	Not established	Not established	Not established	Not established	Not established
n-Amyl acetate	50 ppm/15 minutes	100 ppm	100 ppm	Not established	100 ppm
Methyl Isobutyl Ketone	50 ppm	75 ppm	100 ppm	Not established	50 ppm / STEL 75 ppm
Solvent Naphtha, Light Aromatics	Not established	Not established	500 ppm (2000 mg/m3) TWA	Not established	350 mg/m3 TWA
Propylene Glycol Monomethyl Ether Acetate	Not established	Not established	Not established	Not established	Not established
Diisobutyl Ketone	25 ppm	Not established	50 ppm	Not established	25 ppm
Propyl Benzene	Not established	Not established	Not established	Not established	Not established
1,2,4-Trimethylbenzene	25 ppm	Not established	Not established	Not established	25 ppm
1,3,5-Trimethylbenzene	Not established	Not established	Not established	Not established	25 ppm
Xylene	50 ppm	150 ppm	100 ppm TWA	Not established	Not established
Cumene	50 ppm	Not established	50 ppm TWA	Not established	Not established

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

		ACGIH TLV		OSHA PEL		
INGREDIENTS	TWA	STEL	PEL	STEL	REL	
Hexamethylene -1,6-Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm	
Isophorone Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin	
respiratory protection must self-contained breathing at equipped with an organic v However, this should be pe concentrations (at or near respirator is mandatory wh levels are 10 times the app		of isocyanates exceed the exposure limit or are not known, at be worn. A positive pressure, supplied-air respirator or a apparatus is recommended. At least an air-purifying respirator vapour cartridge and particulate pre-filters must be worn. ermitted only for short periods of time (< 1 hour) at relatively low the exposure limit). The use of a positive pressure air supplied nen airborne concentrations are not known or airborne solvent propriate exposure limit or spraying is performed in a confined lation. Do not exceed the use limits of the respirator.				
chemical. Gloves/ type Chemical res		chemical. Chemical resistant gloves.	uid chemical goggles. Contact lenses should not be worn when working with this emical. emical resistant gloves. Butyl rubber. Neoprene. Nitrile rubber. Practice good hygiene, sh thoroughly before handling any food.			
Clothing/type			clothes. Wear imperviulations. eye wash stations should and handling of the prical ventilation to conchanical exhaust ventilen process equipment be emitted. Standard	uld be available. Educatoroduct. trol exposure levels belation should be used at a cording purging oper reference sources rega	ow airborne sources of air rations, to capture arding industrial	

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state	Liquid.
Colour	Light yellow.
Odour	Solvent odour.
Odour threshold (ppm)	Not available.
Vapour pressure (mm Hg)	
Vapour density (air=1)	No data.
pH	Not applicable.
Relative Density (Specific Gravity)	7.95 lbs/USG; 0.95.
Melting / Freezing point (deg C)	No data.
Solubility	Negligible. Reacts slowly with water to liberate CO2 gas.
Initial boiling point / boiling range (deg C).	No data.
Evaporation rate	No data.
Flash point (deg C), method	-4.0. (estimate; lowest flash point ingredient).
Auto ignition temperature (deg C)	No data.
Upper flammable limit (% vol)	12.8.
Lower flammable limit (% vol)	1.0.
Partition coefficient — n-octanol/water	Not available.
% Volatile by volume	71.66.
VOC	
Viscosity	
-	

SECTION 10: STABILITY AND REACTIVITY

Chemical stabilityReactivity	Stable at normal temperatures and pressures. Avoid heat, sparks and flames. Contact with moisture, other materials that react with
•	isocyanates, or temperatures above 177 C, may cause polymerization.
Possibility of hazardous reactions	Contact with moisture or other materials that react with isocyanates may cause
	polymerization.
	Water, amines, strong bases, alcohols. Copper alloys. Acids.
discharge, shock or vibration	
Hazardous decomposition products	See hazardous combustion products section 5.



SECTION 11: TOXICOLOGICAL INFORMATION

SECTION 11. TOXICOECGICAL INTOXIMATION					
INGREDIENTS		LC50	LD50		
tert-Butyl acetate		>2,230 mg/m3 4 hours rat	4,100 mg/kg rat oral >2,000 mg/kg rabbit dermal		
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)		
Ethyl Acetate		16,000 ppm 6 hours rat	5,600 mg/kg rat oral		
Homopolymer of IPDI		Not Available	Not Available		
Ethyl 3-Ethoxypropionate		>998 ppm 6 hours	4,309 mg/kg rat oral 4,080 mg/kg rabbit dermal		
n-Amyl acetate		>976 ppm 4 hours rat	6500 mg/kg rat oral 8359 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		
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		
Propylene Glycol Monomethyl Ether Acetate		Not Available	8,532 mg/kg (rat oral) >5,000 mg/kg (rabbit dermal)		
Diisobutyl Ketone		>2,300 ppm 4 hours	5,285 mg/kg rat oral >2,000 mg/kg rat dermal		
Propyl Benzene		Not Available	6,040 mg/kg rat oral		
1,2,4-Trimethylbenzene		>2,000 ppm 48 hours rat	3,280 mg/kg rat oral		
1,3,5-Trimethylbenzene		Not Available	Not Available		
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		
Isophorone Diisocyanate		123 mg/m3 4 hours rat	>1,000 mg/kg rat oral 1,060 mg/kg rat dermal		
Route of exposureEffects 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. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.				
Skin contact	Causes skin irritation. Causes skin irritation. Causes skin irritation. Causes sensitized can experience and rash. Cured product	auses reddening, stinging and swel ce allergic reaction with symptoms of t is difficult to remove.	ling. Persons previously of reddening, itching, swelling		
Skin absorption	Not available.				
Eye contactInhalation (acute)	corneal damage. Vapours can produce irritation. Symtoms include tearing and reddening.				

Causes eye irritation. Can cause tearing, reddening and swelling. May cause temporary corneal damage. Vapours can produce irritation. Symtoms include tearing and reddening. Isocyanate 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, difficult breathing and reduced pulmonary functioning. Causes runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limit with similar symptoms as well as asthma attack. Exposure well above the exposure limit may lead to bronchitis, bronchial spasm and pulmonary edema. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be



SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation (acute)..... delayed up to several hours after exposure. Solvent vapours may be irritating to the eyes, nose and throat, resulting in redness, burning and itching of eyes, dryness of the throat and tightness in the chest. Breathing of high vapour concentrations may cause anesthetic effects and serious health effects. Excessive inhalation of vapours can cause respiratory irritation, dizziness, headache, nausea and asphyxiation. May be harmful or fatal if swallowed. Aspiration of material into lungs can cause chemical Ingestion..... pnéumonitis which can be fatal. May cause central nervous system effects such as headache, nausea, vomiting and wéakness. 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. Methyl Isobutyl Ketone is possibly carcinogenic to humans (IARC Group 2B). Cumene is listed by IARC in Group 2B as a possible carcinogen. .
High level exposure to Xylene in some animal studies have been reported to cause health Carcinogenicity of material..... Reproductive effects..... effects on the developing embryo/fetus. The relevance of this to humans is not known. Methyl Isobutyl Ketone is known by the State of California to cause adverse fetal

SECTION 12: ECOLOGICAL INFORMATION

developmental effects.

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

Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations.

SECTION 14: TRANSPORT INFORMATION

UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - This product meets TDG Classification..... 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). Refer to 49CRF 172.101 for additional non-bulk packaging requirements. DOT Classification (Road)..... 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. IATA Classification (Air)..... IMDG Classification (Marine)..... Limited Quantity. Check IMDG regulations for limited quantity exemptions. Marine Pollutant..... Potential 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

CEPA status..... On Domestic Substances List (DSL). TSCA inventory status..... All components are listed. This product is considered hazardous under the OSHA Hazard Communication Standard. OSHA..... SARA Title III Section 302 - extremely hazardous Isophorone Diisocyanate. substances Section 311/312 - hazard categories...... Immediate health, delayed health, fire hazard. Methyl Isobutyl Ketone. Section 313..... Cumene. Hexamethylene diisocyanate. Methyl Isobutyl Ketone. Xylene. EPA hazardous air pollutants (HAPS) 40CFR63 California Proposition 65..... *WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. *WARNING: This product contains a chemical known to the State of California to cause cancer. This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017. (NZ) Statement..... (NZ) HSNO Classifications..... 3.1B. 6.5B. 6.4A. 6.1D. 6.5A. 6.9B. 6.1E. 6.7B. (NZ) HSNO Group Standard..... Surface Coatings/Colourants - Flammable toxic 6.7A HSR002669.

SECTION 16: OTHER INFORMATION

REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com. Prepared by: Telephone number:..... (800) 387-7981.



SECTION 16: OTHER INFORMATION

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

2019-11-13

