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PRODUCT: PF 13068 2K HIGH BUILD PRIMER URETHANE ACTIVATOR

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 13068 2K HIGH BUILD PRIMER URETHANE ACTIVATOR
Recommended use and restrictions on use ..	Accelerator and activator.
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. Aspiration Toxicity 1. Skin Irritation — Category 2. Skin Sensitizer 1. Eye Irritant 2. Acute Toxicity 4. Specific Target Organ Toxicity — Single Exposure — Category 3. (respiratory system). (narcotic effects). Carcinogenicity — Category 2. Reproductive Toxicity — Category 2. Specific Target Organ Toxicity — Repeated Exposure — 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. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 This product contains ingredients that are suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to the liver and kidneys through prolonged or repeated contact.
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. P264 Wash thoroughly after handling. P260 Do not breathe mist, vapours, or spray. P271 Use only outdoors or in a well ventilated area. 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. P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P331 Do NOT induce vomiting. P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P308 + P313 If exposed or concerned, get medical advice/attention. P321 - For specific treatment see section 4 on this SDS.
Storage.....	P403 + P235 Store in well ventilated area. Keep cool. P405 Store locked up. P233 Keep container tightly closed.
Disposal.....	P501 Dispose all unused, waste or empty containers in accordance with local regulations.

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SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME AND SYNONYMS	CAS #	WT. %
Toluene	108-88-3	30-35
Homopolymer of HDI	28182-81-2	15-30
n-Butyl Acetate	123-86-4	15-20
Ethyl Acetate	141-78-6	7-13
Homopolymer of IPDI	53880-05-0	1-5
Ethyl 3-Ethoxypropionate	763-69-9	1-5
Methyl Isobutyl Ketone	108-10-1	1-5
n-Amyl acetate	628-63-7	1-5
Solvent Naphtha, Light Aromatics	64742-95-6	0.5-1.5
Propylene Glycol Monomethyl Ether Acetate	108-65-6	0.5-1.5
Xylene	1330-20-7	<0.3
Cumene	98-82-8	<0.3

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. Give 1 to 2 glasses of water to drink. 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.

Additional information..... Treat victims symptomatically. 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 all cases, if irritation persists seek medical attention. 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, CO2). Oxides of nitrogen. Hydrogen cyanide. Isocyanates. Isocyanic acid. Dense black smoke. 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.

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.

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.

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SECTION 06: ACCIDENTAL RELEASE MEASURES

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..... 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 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. 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: Store in a cool, dry and well ventilated area. Keep away from heat, sparks, and open flames. Store in tightly closed containers to prevent moisture contamination.

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	ACGIH TLV TWA	ACGIH TLV STEL	OSHA PEL PEL	OSHA PEL STEL	NIOSH REL
Toluene	20 ppm	Not established	200 ppm	500 ppm 10 minutes	100 ppm / STEL 150 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
Methyl Isobutyl Ketone	50 ppm	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
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
Xylene	50 ppm	150 ppm	100 ppm TWA	Not established	Not established
Cumene	50 ppm	Not established	50 ppm TWA	Not established	Not established

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. 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. Be sure to use NIOSH approved respirator or equipment. 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.

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SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls.....	Ventilate adequately. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. Avoid breathing mists; if general ventilation or local exhaust is inadequate, persons exposed to mists should wear approved breathing devices.
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. Persons with asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrant 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.
Monitoring.....	Exposure levels must be monitored by accepted monitoring techniques to ensure that the TLV is not exceeded.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state.....	Liquid.
Colour.....	Light yellow.
Odour.....	Characteristic odour.
Odour threshold (ppm).....	Not available.
Vapour pressure (mm Hg).....	Not available.
Vapour density (air=1).....	No data.
pH.....	No data.
Relative Density (Specific Gravity).....	7.97 lbs/USG; 0.955.
Melting / Freezing point (deg C).....	Not available.
Solubility.....	Reacts slowly with water to liberate CO2 gas.
Initial boiling point / boiling range (deg C).	No data.
Evaporation rate.....	Not available.
Flash point (deg C), method.....	-4.0. (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.....	71.05.
VOC.....	5.19 lb/USG - 621.91 g/l.
Viscosity.....	13.2 sec Zahn #2.

SECTION 10: STABILITY AND REACTIVITY

Chemical stability.....	Stable at normal temperatures and pressures.
Reactivity	Avoid heat, sparks and flames. Contact with moisture and other materials will react with isocyanates.
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 ..... 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
Toluene	8000 ppm rat inhalation 400 ppm mouse inhalation 24hr	5,000 mg/kg rat oral; 12,124 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

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SECTION 11: TOXICOLOGICAL INFORMATION

INGREDIENTS	LC50	LD50
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
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)
Xylene	6350 ppm 4 hours rat	>3523 mg/kg rat oral
Cumene	No Data	50 PPM, SKIN

Route of exposure..... Eye contact. Skin contact. Inhalation. Skin absorption.

Effects of acute exposure..... Hazardous in contact with skin, by ingestion, and by inhalation. Irritating to eyes, skin and respiratory system. May be harmful if absorbed through the skin. Can result in irritation in 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..... Reports have associated repeated or prolonged overexposure to solvents with permanent brain and nervous system damage. Prolonged vapour contact may cause conjunctivitis. Prolonged or repeated exposure may cause lung damage, including a decrease in lung function. 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. There is some evidence to suggest that long-term exposure to Toluene may affect hearing.

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

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..... Methyl Isobutyl Ketone is possibly carcinogenic to humans (IARC Group 2B). Cumene is listed by IARC in Group 2B as a possible carcinogen. . Solvent Naphtha is classified as a possible carcinogen. IARC has classified Toluene as a Group 3 (Not classifiable as to its carcinogenicity to humans); ACGIH has classified Toluene as a Group A4 (Not classifiable as a human carcinogen).

Reproductive effects..... Toluene is fetotoxic in rats and mice at maternally toxic levels. Prolonged and repeated exposure of pregnant animals (>1500 ppm) to Toluene have been reported to cause adverse fetal developmental effects. Xylene has been classified by The Commission on Health and Safety as causing reproductive effects. . Methyl isobutyl ketone passes through the placental barrier.

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

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 . Dispose of waste in accordance with all applicable federal, provincial/State and local regulations. Industrial incineration is the preferred method. Empty containers retain product residue; observe all precautions for the product. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. Do not heat or cut empty containers with electric or gas torch as vapours and gases may be toxic.

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 49CRF 172.101 for additional non-bulk packaging requirements.

IATA Classification (Air)..... UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II. Limited Quantity.

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. .

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SECTION 15: REGULATORY INFORMATION

WHMIS 1988 classification	B2. D2A. D2B.
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	Isophorone Diisocyanate.
Section 311/312 - hazard categories	Immediate health, delayed health, fire hazard.
Section 313	Methyl Isobutyl Ketone.
EPA hazardous air pollutants (HAPS) 40CFR63	Cumene. Hexamethylene diisocyanate. Methyl Isobutyl Ketone. Toluene. Xylene.
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.
(NZ) Statement	This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017.
(NZ) HSNO Classifications	3.1B. 6.1E. 6.3A. 6.5B. 6.4A. 6.9B. 6.7B.
(NZ) HSNO Group Standard	Surface Coatings/Colourants - Flammable toxic 6.7A HSR002669.

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.
Date of the latest revision of the safety data sheet	2019-11-13