

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

13406 DTM 2K HB PRIMER CATALYST 0.5 PINT PRODUCT:

SECTION 01: IDENTIFICATION

Initial supplier identifier..... Pro Form Products Ltd. 604 McGeachie Drive

Milton, Ontario L9T3Y5 Tel (905) 878-4990 Fax (905) 878-1189

13406 DTM 2K HB PRIMER CATALYST 0.5 PINT Product identifier.....

Recommended use and restrictions on ...

Chemical family.....

Health: 2 Fire: 4 Reactivity: 1.

Paints. Accelerator and activator.

NFPA rating..... HMIS..... H: 2 F: 4 R: 1.

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 **. 24 hour emergency number:....

SECTION 02: HAZARD IDENTIFICATION





| Signal Word | DANGER. |
|-----------------------|---|
| Hazard Classification | Flammable Liquid 2. Skin Sensitizer — Category 1. Acute Toxicity (Inhalation) — |
| | Category 4. Specific Target Organ Toxicity — Single Exposure — Category 3. (respiratory |
| Howard Decemention | system). (narcotic effects). |
| Hazard Description | H225 Highly flammable liquid and vapour. H317 May cause an allergic skin reaction. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or |
| | dizziness. |
| 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 |
| Danner | protection. |
| Response | P303 + P361 + P353 If on skin or in hair: take off all contaminated clothing immediately. Rinse thoroughly with water and use safety shower . P370 + P378 In case of fire - use dry |
| | chemical powder, CO2 or foam to extinguish. P304 + P340 - If inhaled remove person to |
| | fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor if you |
| | feel unwell. 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. |
| Storage | P233 Keep container tightly closed. P403 + P235 Store in well ventilated area. Keep cool. |
| | 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. % | | |
| tert-Butyl acetate | 540-88-5 | 60-80 | | |
| Homopolymer of HDI | 28182-81-2 | 15-40 | | |

<<The actual concentration(s) withheld as a trade secret>> .

PRODUCT: 13406 DTM 2K HB PRIMER CATALYST 0.5 PINT

SECTION 04: FIRST-AID MEASURES

In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at Eye contact..... least 15 minutes. Check for and remove any contact lenses, if safe and easy to do so. Obtain medical attention. Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Skin contact..... Wash clothing before reuse. If irritation persists, seek medical attention. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is Inhalation..... difficult, give oxygen, obtain medical attention. Do not induce vomiting. Rinse mouth with water. If ingestion is suspected, contact Ingestion..... 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. Harmful if swallowed, in contact with skin or if inhaled. Can cause skin sensitization. May cause respiratory sensitization. High vapour concentrations may be irritating to the Most important symptoms and effects, whether acute or delayed respiratory tract. Can cause central nervous system depression. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Treat victims symptomatically. In all cases, if irritation persists seek medical attention. Skin: this compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. In the event of an incident Additional information..... 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 Dry che media Do not u

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.

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. This material may produce a floating fire hazard. Thermal decomposition products are toxic. May include:. Oxides of carbon (CO, CO2). Smoke. Other potentially toxic fumes. Under hot acidic conditions:. Isobutylene. Acetic acid. Thermal decomposition may release isocyanate vapors.

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

Personal precautions, protectiveequipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. 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. Take precautions against static discharge. Equipment should be grounded.

Methods and materials for containment and cleaning up

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. 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.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....

Employee education and training are important. 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. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed vapour or spray mist. Prevent accumulation of electrostatic charges. Ensure that equipment is properly bonded and grounded during filling and transferring as product may become electrostatically charged. Avoid skin and eye contact. Wash thoroughly after handling. Store in a cool and dry place, for product integrity. Keep away from heat, sparks, and open flames. Store in tightly closed containers to prevent moisture contamination. Attacks some types of rubber, plastics and coatings.

Conditions for safe storage, including any incompatibilities



PRODUCT: 13406 DTM 2K HB PRIMER CATALYST 0.5 PINT

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

| | _ | | | | |
|--|----------|--|--|--|--|
| INODEDIENTO | | CGIH TLV | DEL | OSHA PEL | NIOSH |
| INGREDIENTS | TWA | STEL | PEL | STEL | 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 |
| Appropriate engineering | controls | exposure limits. Local med contamination, such as op gases and fumes that may | chanical exhau pen process eq y be emitted. S ustrial ventilatio | n to control exposure levels bel st ventilation should be used at uipment, or during purging ope tandard reference sources rega on) should be consulted for guid haust ventilation. | sources of air rations, to capture arding industrial |
| Personal Protective Equi | pment | · | • | | |
| Eye/typeGloves/ type | | Wear skin protection equip the nature of the work to b | pment. The sel be performed. oplier for recom | eld if a splash hazard exists. ection of skin protection equipn The following gloves are recom mendations. Practice good hy | nent depends on mended :. Butyl jiene, wash |
| Respiratory/type | | A positive pressure, supple recommended. Whenever not known, respiratory pro equipped with an organic of a positive pressure air sare not known or airborne. | ied-áir respirati concentrations stection must be vapour cartridg supplied respira solvent levels | or or a self-contained breathing s of isocyanates exceed the exe worn. At least an air-purifying the and particulate pre-filters mustor is mandatory when airbornare 10 times the appropriate exe or with limited ventilation. Do | respirator st be worn. The use e concentrations coosure limit or |
| Clothing/type Footwear/type Other/type | | Wear adequate protective Safety boots per local requ | ulations. eye wash static | impervious protective clothing. ons should be available. Education of the product. | te and train |
| Medical surveillance | | Medical supervision of all recommended. These sh with pulmonary function te conditions, chronic bronch or sensitization should be diagnosed as sensitized to | employees whould include prost (FEC, FVC) itis, other chroexcluded from an isocyanate | o handle or come in contact wit eemployment and periodic med as a minimum). Persons with a nic respiratory diseases or recu working with isocyanates. Ond e, no further exposure can be p socyanate, no further exposure | dical examinations asthmatic-type arring skin eczema be a person is ermitted. Once a |
| | | | | | |

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

| Appearance/Physical state | Liquid. |
|--|--|
| Colour | Clear to pale yellow. |
| Odour | Camphor-like. |
| Odour threshold (ppm) | Not available. |
| pH | Not applicable. |
| Melting / Freezing point (deg C) | < -58 C. |
| Initial boiling point / boiling range (deg C). | > 98 C. |
| Flash point (deg C), method | 4 °C. (estimate; lowest flash point ingredient). |
| Evaporation rate | No data. |
| Flammability (solids and gases) | Not applicable. Flammable liquid. |
| Upper flammable limit (% vol) | 6.9. |
| Lower flammable limit (% vol) | 1.2. |
| Lower flammable limit (% vol) | · · · · · · · · · · · · · · · · · · · |
| Vapour pressure (mm Hg) | Not available. |
| Vapour density (air=1) | No data. |
| Relative Density (Specific Gravity) | 0.951. |
| Pounds / USG | 7.94. |
| Solubility | Reacts slowly with water to liberate CO2 gas. |
| Partition coefficient — n-octanol/water | No data. |
| Auto ignition temperature (deg C) | 438. |
| Decomposition temperature | No data. |
| Viscosity | 13" Zahn #2. |
| % Volatile by volume | 0.0. |
| VOC | 0 |

SECTION 10: STABILITY AND REACTIVITY

Product is stable; hazardous polymerization will not occur. Stable at normal temperatures and pressures. Reacts with;. Alcohols. Amines. substances which contain active hydrogen. Reacts with water, with formation of carbon dioxide.



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SECTION 10: STABILITY AND REACTIVITY

Avoid heat, spark, open flames. Moisture.

Strong oxidizing agents. Acids. Alkalies. Nitrates. Plastics. Water. Alcohols. Amines. No hazardous decomposition products when stored and handled correctly. Under hot acidic conditions:. Isobutylene and acetic acid.

SECTION 11: TOXICOLOGICAL INFORMATION

| 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) | | |
| Route of exposure | Can be irritating to eyes and skin. May cause sensitization by skin contact. Harmful if swallowed. Harmful if inhaled. Inhalation may cause respiratory tract irritation. Inhalation of vapours or mist may cause drowsiness or dizziness. The substance may cause sensitization of the respiratory tract. 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. Persons with pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV with similar symptoms, as well as asthma attack. Exposure well above the TLV or PEL 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 | | | | |
| Effects of chronic exposure | central nervous system of Prolonged or repeated efunction. Prolonged skin and in some cases, sens large dose, certain indivi- later exposure to produce | ayed up to several hours after exposure. Effects are usually reversible. May cause tral nervous system effects such as headache, nausea, vomiting and weakness. longed or repeated exposure may cause lung damage, including a decrease in lung ction. Prolonged skin contact may cause reddening, swelling, rash, scaling, blistering, in some cases, sensitization. As a result of previous repeated overexposure or a single e dose, certain individuals develop sensitization which will cause them to react to a r exposure to product at levels well below the exposure limit. Sensitization can be mannent. Intentional misuse by deliberately concentrating and inhaling this product may | | | |
| Sensitizing capability of material | Isocyanates are known t | o cause skin and respiratory sensiti | ization in humans. Animal tests skin contact with diisocyanates. | | |
| Carcinogenicity of material | No component of this pras probable, possible or | roduct present at levels greater than confirmed human carcinogen by IA | n or equal to 0.1% is identified ARC or ACGIH. | | |
| Denveductive offers | | | | | |

SECTION 12: ECOLOGICAL INFORMATION

ATE mix (oral): . >4000 mg/kg.

Ecotoxicity...... No product data.

SECTION 13: DISPOSAL CONSIDERATIONS

Information on safe handling for disposal . and methods of disposal, including any contaminated packaging

Reproductive effects.....

Mutagenicity.....

Specific Target Organ Toxicity

Acute Toxicity Estimate (ATE).....

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

No data on reproductive effects were found in the literature sources consulted.

The data does not allow for an adequate assessment of the mutagenic effect.

May cause drowsiness or dizziness. May cause respiratory irritation.

SECTION 14: TRANSPORT INFORMATION



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SECTION 14: TRANSPORT INFORMATION

In accordance with Part 2.2.1 of the Transportation of Dangerous Goods Regulations (July Proof of Classification..... 2, 2014) - we certify that classification of this product is correct. .

SECTION 15: REGULATORY INFORMATION

TSCA inventory status..... OSHA..... SARA Title III Section 302 - extremely hazardous substances Section 311/312 - hazard categories...... Section 313..... EPA hazardous air pollutants (HAPS) 40CFR63

California Proposition 65.....

A component of this product is not on the NDSL.

All components are listed.

This product is considered hazardous under the OSHA Hazard Communication Standard.

None.

Immediate health, delayed health, fire hazard.

None above De minimus % limit.

Hexamethylene diisocyanate. Methanol.

*** ! WARNING: This product can expose you to chemicals including [see below], which are known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov. (Methanol).

SECTION 16: OTHER INFORMATION

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

(800) 387-7981.

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. 2020-05-13

Date of the latest revision of the safety ... data sheet