



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

PRODUCT: PF 612 TPO ADHESION PROMOTER

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..... PF 612 TPO ADHESION PROMOTER

Recommended use and restrictions on .. Adhesion promoter.
use

Chemical family..... Mixture.

NFPA rating..... Health: 2 Fire: 4 Reactivity: 0.

HMIS..... H: 2 F: 4 R: 0.

24 hour emergency number..... IN CANADA CALL CANUTEC 1-888-226-8832 (CAN-UTEC) - IN THE UNITED STATES
CALL CHEMTREC 1-800-424-9300.

SECTION 02: HAZARD IDENTIFICATION



Signal Word..... DANGER.

Hazard Classification..... Flammable Aerosols — Category 1. Gases Under Pressure: Liquefied Gas. Aspiration Toxicity 1. Skin Irritation — Category 2. Specific Target Organ Toxicity — Single Exposure — Category 3. (narcotic effects). Reproductive Toxicity — Category 2. Specific Target Organ Toxicity — Repeated Exposure — Category 2.

Hazard Description..... H222 Extremely flammable aerosol. H229 Pressurized container: may burst if heated. H280 Contains gas under pressure; may explode if heated. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H361 Suspected of damaging fertility or the unborn child. H373 May cause damage to organs through prolonged or repeated exposure.

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. P211 Do not spray on an open flame or other ignition sources. P251 Do not pierce or burn container, even after use. P260 Do not breathe mist, vapours, or spray. P261 Avoid breathing mists, vapours and sprays. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well ventilated area. P280 Wear protective gloves and eye protection.

Response P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P331 Do NOT induce vomiting. P308 + P313 If exposed or concerned, get medical advice/attention. P302 + P352 - If on skin: wash with plenty of water. P362 + P364 - Take off contaminated clothing and wash before reuse. P332 + P313 - If skin irritation occurs get medical attention or advice. P304 + P340 - If inhaled remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER/doctor if you feel unwell.

Storage..... P410 Protect from sunlight. P412 Do not expose to temperature exceeding 50°C / 122°F. P405 Store locked up. P403 + P233 Store in a well ventilated area. Keep container tightly closed.

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. % |
|----------------------------|----------|-------|
| Isobutyl Acetate | 110-19-0 | 30-60 |
| Toluene | 108-88-3 | 10-30 |
| Propane | 74-98-6 | 10-30 |
| Isobutane | 75-28-5 | 7-13 |

PRODUCT: PF 612 TPO ADHESION PROMOTER**SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS**

Chlorinated Polyolefin 164-1

Not assigned

1-5

SECTION 04: FIRST-AID MEASURES

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| 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..... | 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..... | 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. |
| Most important symptoms and effects, whether acute or delayed | Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Direct contact with eyes may cause temporary irritation. May damage fertility or the unborn child. |
| 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. |

SECTION 05: FIRE-FIGHTING MEASURES

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| Suitable and unsuitable extinguishing media | Carbon dioxide, dry chemical, foam. Water spray. 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). Hazardous organic compounds. |
| Special protective equipment and precautions for fire-fighters | Extremely flammable aerosol. 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. Heat will cause pressure buildup and may cause explosive rupture. |

SECTION 06: ACCIDENTAL RELEASE MEASURES

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| Leak/spill..... | No action shall be taken involving any personal risk or without suitable training. Ventilate. Eliminate all sources of ignition. Contain the spill. Avoid all personal contact. Evacuate all non-essential personnel. 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. |
| Methods and materials for containment and cleaning up | |

SECTION 07: HANDLING AND STORAGE

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| 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. Avoid breathing vapours or mist. Ground handling equipment. Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. Handle and open container with care. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. 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 50 deg C. |

PRODUCT: PF 612 TPO ADHESION PROMOTER**SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION**

| INGREDIENTS | TWA | ACGIH TLV STEL | PEL | OSHA PEL STEL | REL | NIOSH |
|---------------------------------------|---|-------------------|-----------------|--------------------|------------------------|-------|
| Isobutyl Acetate | 50 ppm | 150 ppm | 150 ppm | Not established | 150 ppm | |
| Toluene | 20 ppm | Not established | 200 ppm | 500 ppm 10 minutes | 100 ppm / STEL 150 ppm | |
| | CA ON: TWA: 20 ppm | | | | | |
| Propane | 1,000 ppm | Not established | 1,000 ppm | Not established | 1,000 ppm | |
| Isobutane | Not established | Not established | Not established | Not established | 800 ppm | |
| Chlorinated Polyolefin 164-1 | Not established | | Not established | | Not established | |
| Eye/type..... | Liquid chemical goggles. | | | | | |
| Respiratory/type..... | Local exhaust ventilation is recommended. Wear an appropriate, properly fitted respirator when contaminant levels exceed the recommended exposure limits. | | | | | |
| Gloves/ type..... | Chemical resistant gloves. | | | | | |
| Clothing/type..... | Wear adequate protective clothes. | | | | | |
| Footwear/type..... | Safety boots per local regulations. | | | | | |
| Other/type..... | Emergency showers and eye wash stations should be available. | | | | | |
| 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

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| Appearance/Physical state..... | Aerosol. |
| Colour..... | Colourless. |
| Odour..... | Fruity odour. |
| Odour threshold (ppm)..... | Not available. |
| Vapour pressure (mm Hg)..... | Aerosol vapour pressure: 60-80 psig @ 21C. |
| Vapour density (air=1)..... | 4.0. (liquid). |
| pH..... | 6.7. |
| Relative Density (Specific Gravity)..... | Liquid: 0.870 - Aerosol: 0.789. |
| Melting / Freezing point (deg C)..... | Not available. |
| Solubility..... | Soluble. |
| Initial boiling point / boiling range (deg C)..... | 117°C. (Liquid). |
| Evaporation rate..... | Not available. |
| Flash point (deg C), method..... | 22C. (estimate for liquid). |
| Auto ignition temperature (deg C)..... | 460 °C (propellant) . |
| Upper flammable limit (% vol)..... | 9.5. (Propane). |
| Lower flammable limit (% vol)..... | 2.2. (Propane). |
| Partition coefficient — n-octanol/water..... | None. |
| VOC (less water)..... | Not available. |
| Viscosity..... | Not available. |

SECTION 10: STABILITY AND REACTIVITY

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| 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. |
| Possibility of hazardous reactions..... | Hazardous polymerization will not occur. |
| Conditions to avoid, including static discharge, shock or vibration | Keep away from heat. Incompatible with strong oxidizers. |
| Hazardous decomposition products..... | See hazardous combustion products section 5. |

SECTION 11: TOXICOLOGICAL INFORMATION

| INGREDIENTS | LC50 | LD50 |
|------------------|----------------------|---|
| Isobutyl Acetate | >13.24 mg/L /6 h rat | 15400 mg/kg (rat oral), >17400 mg/kg (rabbit dermal) |

PRODUCT: PF 612 TPO ADHESION PROMOTER**SECTION 11: TOXICOLOGICAL INFORMATION**

| INGREDIENTS | LC50 | LD50 |
|---|---|---|
| Toluene | 8000ppm rat inhalation 400ppm mouse inhalation 24hr | 5,000 mg/kg rat oral; 12,124 mg/kg rabbit dermal |
| Propane | >1,464 mg/L 15 minutes rat | Not available |
| Isobutane | 52 mg/L 1 hour mouse | Not available |
| Chlorinated Polyolefin 164-1 | Not available | Not available |
| Route of exposure..... | Inhalation. Eye contact. Skin contact. Skin absorption. | |
| 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. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Causes skin irritation. | |
| Effects of chronic exposure..... | Breathing high concentrations of vapour may cause anesthetic effects and serious health effects. Chronic exposure to organic solvent vapors have been associated with various neurotoxic effects including permanent brain and/or nervous system damage, kidney, liver, blood damage and reproductive effects among women. Symptoms may include nausea, vomiting, abdominal pain, headache, impaired memory, loss of coordination, insomnia and breathing difficulties. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. | |
| Carcinogenicity of material..... | 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 known by the State of California to cause adverse fetal developmental effects. | |
| Sensitizing capability of material..... | May cause sensitization by inhalation. May cause sensitization by skin contact. | |

SECTION 12: ECOLOGICAL INFORMATION

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| Environmental..... | Do not allow to enter waters, waste water or soil. |
| Persistence and degradability..... | Not available. |

SECTION 13: DISPOSAL CONSIDERATIONS

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| Information on safe handling for disposal and methods of disposal, including any contaminated packaging | This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Dispose of waste in accordance with all applicable Federal, Provincial/State and local regulations. Empty containers must be handled with care due to product residue. Contents under pressure. Do not puncture, incinerate or expose to heat, even when empty. |
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SECTION 14: TRANSPORT INFORMATION

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| TDG Classification..... | UN1950 - AEROSOLS, flammable - Class 2.1 - This product meets limited quantity exemption when shipped in containers less than 1 Litre. |
| DOT Classification (Road)..... | UN1950 - AEROSOLS, flammable - Class 2.1 - Ltd Qty (1 Liter/0.26 Gallons). |
| IATA Classification (Air)..... | UN1950 - AEROSOLS, flammable - Class 2.1 - Limited Quantity. Do not ship by air without checking appropriate IATA regulations. |
| IMDG Classification (Marine)..... | UN1950 - AEROSOLS - Class 2.1 - EmS: F-D, S-U - 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

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| 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..... | Toluene. |
| EPA hazardous air pollutants (HAPS) 40CFR63 | Toluene. Ethylbenzene. |
| 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. |

PRODUCT: PF 612 TPO ADHESION PROMOTER

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.

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 data sheet