Plastique Royal
2809 Rue Etienne Lenoir
Laval; H7R 6J4
QC

# PRODUCT: PRH 47 ACTIVATOR

## Section 01: Chemical product and company identification

| | |
|---|---|
| Product name | PRH 47 ACTIVATOR |
| Manufactured for | Plastique Royal Inc.,<br>2809 Rue Etienne-Lenoir<br>Laval, QC H7R 6J4 |
| 24 hour emergency number: | IN CANADA CALL CANUTEC (613) 996-6666-IN THE UNITED STATES CALL CHEMTREC (800) 424-9300. |
| Material use | Paints. Accelerator and activator. This product should not be used for any other purpose other than the ones described in this section. |
| Chemical family | Mixture. |
| Preparation date | October 23 2014. |
| Hazard rate | |
| NFPA rating | Health: 2 Fire: 3 Reactivity: 0. |
| HMIS | H: 2 F: 3 R: 0. |

## Section 02: Hazards identification

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| Signal Word | DANGER. |
| Hazard Classification | Aspiration Toxicity 1. Carcinogen 2. Eye Irritant 2. Flammable Liquid 2. Reproductive 2. Respiratory Sensitizer 1. Skin Sensitizer 1B. STOT SE 3. |
| Hazard Description | H225 Highly flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H334 May cause allergy or asthma symptoms or breathing difficulties 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 This product contains ingredients that are suspected of damaging fertility or the unborn child. |
| Precautionary Statements | 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. P260 Do not breathe mist, vapours, or spray. P264 Wash thoroughly after handling. P270 Do not eat drink or smoke while using this product. 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 | P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P302 + P352 - If on skin: wash with plenty of water. . 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. 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. P308 + P311 If exposed or concerned; call a poison center or doctor. P312 Call a poison center/doctor if you feel unwell. P331 Do NOT induce vomiting. P337 + P313 - If eye irritation persists get medical attention. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor. P362 + P364 - Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire - use dry chemical powder, CO2 or 6% foam. |
| Storage | P403 + P233 Store in a well ventilated area. 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. |

## Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredients | CAS # | Wt. % |
|---|---|---|
| HOMOPOLYMER OF HDI | 28182-81-2 | 10-30 |
| HOMOPOLYMER OF IPDI | 53880-05-0 | 10-30 |
| ACETIC ACID, TERT-BUTYL ESTER | 540-88-5 | 15-30 |
| N-BUTYL ACETATE | 123-86-4 | 10-30 |
| N-AMYL ACETATE | 628-63-7 | 5-10 |

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## Section 03: COMPOSITION/INFORMATION ON INGREDIENTS

| | | |
|---|---|---|
| ETHYL 3-ETHOXYPROPIONATE | 763-69-9 | 5-10 |
| SOLVENT NAPHTHA, LIGHT AROMATICS | 64742-95-6 | 5-10 |
| METHYL ISOBUTYL KETONE | 108-10-1 | 5-10 |
| PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE | 108-65-6 | 1-5 |
| PROPYL BENZENE | 103-65-1 | 0.5-5 |
| DIISOBUTYL KETONE | 108-83-8 | 0.5-5 |
| ISOPHORONE DIISOCYANATE | 4098-71-9 | 0.1-1.0 |

## 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. 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.

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

Extinguishing media..... "Alcohol" foam, CO2, 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 .

Hazardous combustion products..... Oxides of carbon (CO, CO2). Thermal decomposition may release isocyanate vapors. Hydrogen cyanide. Oxides of nitrogen.

Special fire fighting procedures..... 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. Contain the spill. Avoid all personal contact. 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. 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%).

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

Handling procedures..... Avoid all skin contact and ventilate adequately, otherwise wear an appropriate breathing apparatus. 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. Handle and open container with care. Employees should wash hands and face before eating or drinking. Keep away from heat, sparks, and open flame.

Storage needs..... 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.

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## Section 08: Exposure controls / personal protection

Protective equipment

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.
Ventilation requirements..... 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. .

Exposure limits

| Ingredients | ACGIH TLV TWA | ACGIH TLV STEL | OSHA PEL PEL | OSHA PEL STEL | NIOSH REL |
|---|---|---|---|---|---|
| HOMOPOLYMER OF HDI | 5 mg/m3 | Not established | 5 mg/m3 | Not established | 5 mg/m3 |
| HOMOPOLYMER OF IPDI | Not established | Not established | Not established | Not established | Not established |
| ACETIC ACID, TERT-BUTYL ESTER | 200 ppm | not established | 200 ppm | not established | 200 ppm |
| N-BUTYL ACETATE | 150 ppm | 200 ppm | 150 ppm | 200 ppm | 150 ppm / STEL 200 ppm |
| N-AMYL ACETATE | 50 ppm/15 minutes | 100 ppm | 100 ppm | Not established | 100 ppm |
| ETHYL 3-ETHOXYPROPIONATE | not established | not established | not established | not established | not established |
| SOLVENT NAPHTHA, LIGHT AROMATICS | 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 |
| PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE | not established | not established | not established | not established | not established |
| PROPYL BENZENE | Not established | Not established | Not established | Not established | Not established |
| DIISOBUTYL KETONE | 25 ppm | Not established | 50 ppm | Not established | 25 ppm |
| ISOPHORONE DIISOCYANATE | 0.005 ppm | Not established | Not established | Not established | 0.005 ppm skin |

## Section 09: Physical and chemical properties

Physical state..... Liquid.
Colour..... Light yellow.
Odour..... Ketone odour.
Odour threshold (ppm)..... No data.
Vapour pressure (mm Hg)..... No data.
Vapour density (air=1)..... >1.
pH..... Not applicable.
Specific gravity..... 8.491 lb/USG - 1.02 g/mL.
Freezing point (deg C)..... -40°C.
Solubility..... Slightly soluble in water.
Boiling point (deg C)..... 98 °C (208 °F).
Evaporation rate..... Moderate.
Flash point (deg C), method..... - 4°C closed cup.
Auto ignition temperature (deg C)..... No data.
Upper flammable limit (% vol)..... 10.6%.
Lower flammable limit (% vol)..... 0.9%.
Coefficient of water\oil distribution..... No data.
VOC..... 1.64 lb/usg.
Viscosity..... 16.5 sec Zahn # 2 .

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## Section 10: Stability and reactivity

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| Stability | Stable at normal temperatures and pressures. |
| Reactivity conditions | Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong oxidizing agents. Contact with moisture and other materials will react with isocyanates. |
| Incompatibility | Keep away from heat. Incompatible with strong oxidizers. Copper. Water, amines, strong bases, alcohols. |
| Hazardous products of decomposition | By fire:. Isocyanates. Dense black smoke. Oxides of nitrogen. Oxides of carbon (CO,CO2). |
| Hazardous polymerization | Contact with moisture or other materials that react with isocyanates may cause polymerization. |

## Section 11: Toxicological information

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| Route of entry | 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. |
| 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 contact | Can cause moderate irritation, defatting and dermatitis. |
| Skin absorption | Chronic skin exposure to solvents may cause effects similar to those identified under chronic inhalation. |
| Eye contact | Can cause redness, irritation, tissue destruction. |
| Inhalation (acute) | 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. 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. |
| Inhalation (chronic) | 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. Excessive inhalation of vapours can cause respiratory irritation, dizziness, headache, nausea and asphyxiation. |
| Ingestion | Aspiration of material into lungs can cause chemical pneumonitis which can be fatal. May be harmful or fatal if swallowed. |
| Carcinogenicity of material | Methyl Isobutyl Ketone is possibly carcinogenic to humans (Group 2B). |
| Reproductive effects | Methyl Isobutyl Ketone is known by the State of California to cause adverse fetal developmental effects. |

Toxicological Data

| Ingredients | LC50-inh, rat | LD50-Oral,rat |
|---|---|---|
| HOMOPOLYMER OF HDI | 390-453 mg/m3 rat 4 hours | > 5,000 mg/kg rat oral; > 5,000 mg/kg rabbit dermal |
| HOMOPOLYMER OF IPDI | No data | No data |
| ACETIC ACID, TERT-BUTYL ESTER | >2,230 mg/m3 4 hours rat | 4,100 mg/kg rat oral >2,000 mg/kg rabbit dermal |
| N-BUTYL ACETATE | 1.36 - 2.38 mg/L 4 hours rat | >3200 mg/kg rat oral >5000 mg/kg rabbit dermal |
| N-AMYL ACETATE | >976 ppm 4 hours rat | 6500 mg/kg rat oral 8359 mg/kg rabbit dermal |
| ETHYL 3-ETHOXYPROPIONATE | >998 ppm 6 hours | 4,309 mg/kg rat oral 4,080 mg/kg rabbit dermal |
| SOLVENT NAPHTHA, LIGHT AROMATICS | 5.2 mg/L 4 hours rat | >5,000 mg/kg rat oral >3,160 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 |
| PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE | No data | 8,532 mg/kg rat oral >5,000 mg/kg rabbit dermal |
| PROPYL BENZENE | No data | 6,040 mg/kg rat oral |
| DIISOBUTYL KETONE | >2,300 ppm 4 hours | 5,285 mg/kg rat oral >2,000 mg/kg rat dermal |
| ISOPHORONE DIISOCYANATE | 123 mg/m3 4 hours rat | >1,000 mg/kg rat oral 1,060 mg/kg rat dermal |

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## Section 12: Ecological information

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| Environmental | Do not allow to enter waters, waste water or soil. |
| Biodegradability | No data. |

## Section 13: Disposal considerations

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| Waste disposal | 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. |

## Section 14: Transport information

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| TDG Classification (Road) | 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 (5 Liters/1.3 Gallons). |
| IATA Classification (Air) | UN1263 - Paint Related Material - Class 3 - Packing Group II. |
| IMDG Classification (Marine) | UN1263 - Paint Related Material - Class 3 - Packing Group II - EmS: F-E S-E. |
| 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

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| WHMIS classification | B2. D2A. D2B. |
| CEPA status | On Domestic Substances List (DSL). |
| OSHA | This product is considered hazardous under the OSHA Hazard Communication Standard. |
| SARA Title III | |
| Section 302 - extremely hazardous substances | Isophorone Diisocyanate TPQ 100. |
| Section 311/312 - hazard categories | Immediate health, delayed health, fire hazard. |
| Section 313 | Tert-butyl acetate. Methyl Isobutyl Ketone. Amyl Acetate. N-butyl acetate. Isophorone Diisocyanate. |
| EPA hazardous air pollutants (HAPS) 40CFR63 | Methyl Isobutyl Ketone. |
| TSCA inventory status | All components are listed. |
| California Proposition 65 | This product contains Methyl Isobutyl Ketone (MIBK) known to the State of California to cause cancer. Methyl Isobutyl Ketone is known by the State of California to cause adverse fetal developmental effects. |

## Section 16: Other information

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| Prepared by: | REGULATORY AFFAIRS. |
| 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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