



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

## PRODUCT: FUS 25LV MEDIUM ACTIVATOR

### Section 01: Chemical product and company identification

Product name..... FUS 25LV MEDIUM ACTIVATOR  
 Manufactured for..... Plastique Royal Inc.,  
 2809 Rue Etienne-Lenoir  
 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..... December 17, 2014.  
 Hazard rate  
 NFPA rating..... Health: 2 Fire: 3 Reactivity: 0.  
 HMIS..... H: 2 F: 3 R: 0.

### Section 02: Hazards identification



Signal Word..... DANGER.  
 Hazard Classification..... Flammable Liquid 2. Skin Sensitizer 1. Eye Irritant 2. Respiratory Sensitizer 1A. STOT SE  
 3. Carcinogen 2. Reproductive 2.  
 Hazard Description..... H225 Highly flammable liquid and vapour. 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. P261 Avoid breathing mists, vapours and sprays. P264 Wash hands  
 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 ..... 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 + P313 If exposed or concerned, get medical advice/attention. P312 Call  
 a poison center/doctor if you feel unwell. P321 - Consult with a doctor or poison control  
 centre if skin is itchy or a skin rash develops or you feel unwell. P333 + P313 If skin  
 irritation or rash occurs, medical advice/attention. 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. %
ACETIC ACID, TERT-BUTYL ESTER	540-88-5	30-60
HOMOPOLYMER OF HDI	28182-81-2	10-30
HOMOPOLYMER OF IPDI	53880-05-0	7-13
N-BUTYL ACETATE	123-86-4	7-13
ETHYL 3-ETHOXYPROPIONATE	763-69-9	3-7

**PRODUCT: FUS 25LV MEDIUM ACTIVATOR****Section 03: COMPOSITION/INFORMATION ON INGREDIENTS**

SOLVENT NAPHTHA, LIGHT AROMATICS	64742-95-6	3-7
N-AMYL ACETATE	628-63-7	3-7
METHYL ISOBUTYL KETONE	108-10-1	3-7
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	108-65-6	3-7
DIISOBUTYL KETONE	108-83-8	0.5-5
PROPYL BENZENE	103-65-1	0.5-5
ISOPHORONE DIISOCYANATE	4098-71-9	0.1-1.0
HEXAMETHYLENE DIISOCYANATE	822-06-0	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.
Special fire fighting procedures.....	Hydrogen cyanide. Oxides of nitrogen. 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.

**PRODUCT: FUS 25LV MEDIUM ACTIVATOR****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	TWA	ACGIH TLV STEL	PEL	OSHA PEL STEL	REL NIOSH
ACETIC ACID, TERT-BUTYL ESTER	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
HOMOPOLYMER OF IPDI	Not established	Not established	Not established	Not established	Not established
N-BUTYL ACETATE	150 ppm	200 ppm	150 ppm	200 ppm	150 ppm / STEL 200 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
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
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
ISOPHORONE DIISOCYANATE	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin
HEXAMETHYLENE DIISOCYANATE	0.005 ppm	Not established	Not established	Not established	0.005 ppm

**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..... 8.33 lb/usg - 1.00 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..... 14°C Closed Cup.  
 Auto ignition temperature (deg C)..... 272°C .  
 Upper flammable limit (% vol)..... 9.8.  
 Lower flammable limit (% vol)..... 0.8.  
 Coefficient of water/oil distribution..... No data.  
 VOC..... 0.98 lb/usg - 117.43 g/L.  
 Viscosity..... 14.8 sec Zahn #2.

**PRODUCT: FUS 25LV MEDIUM ACTIVATOR****Section 10: Stability and reactivity**

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**

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
ACETIC ACID, TERT-BUTYL ESTER	>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
HOMOPOLYMER OF IPDI	No data	No data
N-BUTYL ACETATE	1.36 - 2.38 mg/L 4 hours rat	>3200 mg/kg rat oral >5000 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
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
PROPYLENE GLYCOL MONOMETHYL ETHER ACETATE	No data	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	No data	6,040 mg/kg rat oral
ISOPHORONE DIISOCYANATE	123 mg/m3 4 hours rat	>1,000 mg/kg rat oral 1,060 mg/kg rat dermal
HEXAMETHYLENE DIISOCYANATE	22 ppm 4 hours rat	738 mg/kg rat oral 593 mg/kg rabbit dermal

**PRODUCT: FUS 25LV MEDIUM ACTIVATOR****Section 12: Ecological information**

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

**Section 13: Disposal considerations**

Waste disposal..... 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.

**Section 14: Transport information**

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**

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..... Methyl Isobutyl Ketone. Isophorone Diisocyanate. Hexamethylene diisocyanate.  
EPA hazardous air pollutants (HAPS) ..... Methyl Isobutyl Ketone. Hexamethylene diisocyanate.  
40CFR63  
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.

**Section 16: Other information**

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.  
Preparation date: ..... Dec17/14