

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

PRODUCT: 12352 SLOW ACTIVATOR

SECTION 01: IDENTIFICATION

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

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

12352 SLOW ACTIVATOR

Product identifier..... Recommended use and restrictions on ...

Paints. Accelerator and activator.

DANGER.

Chemical family.....

NFPA rating..... HMIS.....

Health: 3 fire: 3 reactivity: 2. H: 3 F: 3 R: 2.

24 hour emergency number:.....

Signal Word.....

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 **.

SECTION 02: HAZARD IDENTIFICATION



Flammable Liquid 2. Acute Toxicity (Oral) — Category 4. Aspiration Toxicity 1. Skin Irritation — Category 2. Skin Sensitizer — Category 1. Eye Irritation — Category 2A. Acute Toxicity (Inhalation) — Category 4. Respiratory Sensitizer — Category 1. Specific Target Organ Toxicity — Single Exposure — Category 3. (respiratory system). Hazard Classification..... Carcinogenicity — Category 2. Reproductive Toxicity — Category 2. H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic Hazard Description..... skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 This product contains ingredients that are suspected of causing cancer. H361 Suspected of damaging fertility or the unborn child.
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, Prevention..... 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 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. P370 + P378 In case of fire - use dry chemical powder, CO2 or foam to extinguish. P303 + Response 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. P342 + P311 If experiencing respiratory symptoms; call poison center or doctor. P301 + P312 If swallowed call a poison control centre. P301 + P310 If swallowed IMMEDIATELY CALL A POISON CONTROL CENTRE and follow instructions provided by the centre. P330 Rinse mouth. P331 Do NOT induce vomiting. P312 Call a POISON CENTER/doctor if you feel unwell. 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. 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. P321 - For specific treatment see section 4 on this SDS. P405 Store locked up. P403 + P235 Store in well ventilated area. Keep cool. P403 + P233 Storage..... Store in a well ventilated area. Keep container tightly closed. P501 Dispose all unused, waste or empty containers in accordance with local regulations. Disposal.....

SECTION 02: HAZARD IDENTIFICATION

Note This product mixture has been classified based on its ingredients.

SECTION 03: COMPOSITION / INFORMATION ON INGREDIENTS				
CHEMICAL NAME AND SYNONYMS	CAS#	WT. %		
Methyl N-Amyl Ketone	110-43-0	10-20		
2-Butoxyethyl Acetate	112-07-2	10-20		
Homopolymer of HDI	28182-81-2	9-16		
Homopolymer of IPDI	53880-05-0	9-16		
n-Amyl acetate	628-63-7	4-9		
Methyl Isobutyl Ketone	108-10-1	4-9		
n-Butyl Acetate	123-86-4	4-9		
Ethyl 3-Ethoxypropionate	763-69-9	4-9		
Solvent Naphtha, Light Aromatics	64742-95-6	1-6		
2-Propanol, 1-methoxy-, acetate	108-65-6	1-6		
Diisobutyl Ketone	108-83-8	<4		
1,2,4-Trimethylbenzene	95-63-6	<4		
Propyl Benzene	103-65-1	<4		
1,3,5-Trimethylbenzene	108-67-8	<4		
Xylene	1330-20-7	<0.7		
Cumene	98-82-8	<0.7		
Isophorone Diisocyanate	4098-71-9	<0.5		

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.
	Obtain medical attention.
Skin contact	If irritation persists, seek medical attention. Immediately flush skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse.
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. Rinse mouth with water. Do not induce vomiting.
Additional information	In all cases, if irritation persists seek medical attention. 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. Ingestion: treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. 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. 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.

Oxides of carbon (CO, CO2). Oxides of nitrogen. Smoke. Hydrogen cyanide. Isocyanates. Other potentially toxic fumes.

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. 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.
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.
Minor spills	Large quantities may be pumped into closed, but not sealed, containers for disposal. Absorb isocyanates with sawdust or other absorbent. Pour decontamination solution over spill area and allow to react for at least 10 minutes. Shovel into suitable containers and add further amounts of decontamination solution. Add about 10 parts of decontamination solution per part of isocyanate. Decontamination solution: Decontamination Solution: Mixture of water (80%) with non-ionic surfactant Tergitol TMN-10 (20%), or; water (90%), concentrated ammonia (3-8%) and detergent (2%). Allow to stand uncovered for 72 hours to let carbon dioxide escape.
Clean up	Decontaminate floor with decontamination solution, letting stand for at least 15 minutes.

SECTION 07: HANDLING AND STORAGE

Precautions for safe handling.....

Keep away from heat, sparks, and open flame. Ensure that equipment is properly bonded and grounded during filling and transferring as product may become electrostatically charged. Do not breathe vapours, mist or dust. Use adequate ventilation. Wear respiratory protection if material is heated, sprayed, used in confined space, or if exposure limit is exceeded. Warning properties (irritation of the eyes, nose and throat or odour) are not adequate to prevent chronic overexposure from inhalation. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed vapour or spray mist. Avoid skin and eye contact. Wash thoroughly after handling. Decomposition products are highly toxic and irritating. Employee education and training are important. Storage temperature min/max -34 - 50 C. Store in tightly closed containers to prevent moisture contamination. Keep away from heat, sparks, and open flames. Do not reseal if contamination is suspected. Exposure to vapours of heated isocyanates can be extremely dangerous.

Conditions for safe storage, including any incompatibilities

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	IH TLV STEL	PEL	A PEL STEL	NIOSH REL	
Methyl N-Amyl Ketone	50 ppm	Not established	100 ppm	465 mg/m3 TWA	Not established	
	ON OEL: 25 ppm; 1	15 mg/m3 (TWA)				
2-Butoxyethyl Acetate	20 ppm TLV	Not established	Not established	Not established	5 ppm	
Homopolymer of HDI	5 mg/m3	Not established	5 mg/m3	Not established	5 mg/m3	
	Supplier: 0.5 mg/m3	(TWA)				
Homopolymer of IPDI	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	
	ON: 20 ppm (TWA),	75 ppm (STEL)				
n-Butyl Acetate	50 ppm	150 ppm	150 ppm	200 ppm	150 ppm / STEL 200 ppm	
	CA ON: 50ppm (TW	A), 150ppm (STEL)				
Ethyl 3-Ethoxypropionate	Not established	Not established	Not established	Not established	Not established	
Solvent Naphtha, Light Aromatics	Not established	Not established	500 ppm (2000 mg/m3) TWA	Not established	350 mg/m3 TWA	
2-Propanol, 1-methoxy-, acetate	50 ppm	75 ppm	Not established	Not established	Not established	
Diisobutyl Ketone	25 ppm	Not established	50 ppm	Not established	25 ppm	
1,2,4-Trimethylbenzene	25 ppm	Not established	Not established	Not established	25 ppm	

SECTION 08: EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENTS	TWA	CGIH TLV STEL	OS PEL	SHA PEL STEL	NIOSH REL
Propyl Benzene	Not established	Not established	Not established	Not established	Not established
1,3,5-Trimethylbenzene	Not established	Not established	Not established	Not established	25 ppm
Xylene	50 ppm	150 ppm	100 ppm TWA	Not established	Not established
	CA ON: 100ppm	(TWA); 150ppm (STEL)			
Cumene	50 ppm	Not established	50 ppm TWA	Not established	Not established
Isophorone Diisocyanate	0.005 ppm	Not established	Not established	Not established	0.005 ppm skin
Personal Protective Equipment Eye/type Respiratory/type Gloves/ type Clothing/type Footwear/type Other/type Appropriate engineering controls		self-contained breathing a equipped with an organic However, this should be proconcentrations (at or near respirator is mandatory while vels are 10 times the appace or with limited ventic Chemical resistant gloves wash thoroughly before however adequate protective Safety boots per local regemergency showers and employees on the safe us Provide natural or mecha exposure limits. Local mecontamination, such as orgases and fumes that mandatory in the safe us provide natural or mechanical mecontamination, such as orgases and fumes that mandatory is should be provided in the safe us provided in the safe u	of isocyanates except be worn. A positive paratus is recommon yapour cartridge are remitted only for short the exposure limit, then airborne concepropriate exposure lation. Do not exceptly rubber. Neo andling any food. I clothes. Wear impulations. Every wash stations see and handling of the chanical exhaust vectors are comprocess equipment of the comprocess equip	reed the exposure limit or a prepared to pressure, supplied-air runended. At least an air-pund particulate pre-filters munort periods of time (< 1 ho. The use of a positive prentrations are not known or limit or spraying is performed the use limits of the resprene. Nitrile rubber. Pracervious protective clothing should be available. Education	are not known, espirator or a rifying respirator ust be worn. sur) at relatively low essure air supplied rairborne solvent ned in a confined spirator. tice good hygiene, ate and train
Exposure limits		222 43000 1011110111			

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical state	Liquid.
Colour	Light yellow.
Odour	Solvent odour.
Odour threshold (ppm)	Not available.
Vapour pressure (mm Hg)	Not available.
Vapour density (air=1)	No data.
pH	Not applicable.
Relative Density (Specific Gravity)	8.30 lbs/USG: 0.994.
Melting / Freezing point (deg C)	No data.
Solubility	Negligible.
Initial boiling point / boiling range (deg C).	No data.
Evaporation rate	No data.
Flash point (deg C), method	12 °C. (estimate; lowest flash point ingredient).
Auto ignition temperature (deg C)	No data.
Upper flammable limit (% vol)	10.6.
Lower flammable limit (% vol)	0.9.
Partition coefficient — n-octanol/water	Not available.
% Volatile by volume	53.28.
VOC (less water)	3.89 lb/usg - 466.12 g/L.
Viscosity	15.0 sec Zahn #2.
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SECTION 10: STABILITY AND REACTIVITY

Chemical stability	Stable at normal temperatures and pressures.
Reactivity	Avoid heat, sparks and flames. Explosive reactions can occur in the presence of strong
Possibility of hazardous reactions	oxidizing agents. Contact with moisture or other materials that react with isocyanates may cause polymerization.
Conditions to avoid, including static discharge, shock or vibration	Water, amines, strong bases, alcohols. Copper alloys.



SECTION 10: STABILITY AND REACTIVITY

Hazardous decomposition products....... See hazardous combustion products section 5.

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SECTION 11	· TOXICOLOGICA	LINFORMATION

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INGREDIENTS		LC50		LD50		
Methyl N-Amyl Ketone		Not Available		1,670 mg/kg rat oral mg/kg rabbit dermal	12,600	
2-Butoxyethyl Acetate		> 450 ppm rat 6h	> 450 ppm rat 6h		1,600 mg/kg (rat, oral) 1,480 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		Not Available		Not Available		
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		
n-Butyl Acetate		>33 mg/L vapour, (rat) dust/mist	5.2 mg/L	10760 mg/kg (rat, oral) mg/kg (rabbit, dermal)	14112	
Ethyl 3-Ethoxypropionate		>998 ppm 6 hours		4,309 mg/kg rat oral mg/kg rabbit dermal	4,080	
Solvent Naphtha, Light Aromatics		5.2 mg/L 4 hours, rat hours, rat	5.2 mg/L 4 hours, rat 3400 ppm 4 hours, rat		>5,000 mg/kg rat oral >2,000 mg/kg rabbit dermal	
2-Propanol, 1-methoxy-, acetate		Not Available		8,532 mg/kg rat oral 5,000 mg/kg dermal rabbit		
Diisobutyl Ketone		>2,300 ppm 4 hours		5,285 mg/kg rat oral >2,000 mg/kg rat dermal		
1,2,4-Trimethylbenzene		>2,000 ppm 48 hours rat		3,280 mg/kg rat oral		
Propyl Benzene		Not Available		6,040 mg/kg rat oral		
1,3,5-Trimethylbenzene		Not Available		Not Available		
Xylene		6350 ppm 4 hours rat		>3523 mg/kg rat oral		
Cumene		No Data		50 PPM, SKIN		
Isophorone Diisocyanate		123 mg/m3 4 hours r	123 mg/m3 4 hours rat		>1,000 mg/kg rat oral 1,060 mg/kg rat dermal	
Route of exposure	 Causes skin irritation. Causes reddening, stinging and swelling. Persons previously sensitized can experience allergic reaction with symptoms of reddening, itching, swelling and rash. Cured product is difficult to remove. Not available. Causes eye irritation. Can cause tearing, reddening and swelling. May cause temporary corneal damage. Vapours can produce irritation. Symtoms include tearing and reddening. 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. Causes runny nose, sore throat, coughing, chest discomfort, difficult breathing and reduced pulmonary functioning. Persons with preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limit with similar symptoms as well as asthma attack. Exposure well above the exposure limit 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 delayed up to several hours after exposure. 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. Excessive inhalation of vapours can cause respiratory irritation, dizziness, headache, nausea and asphyxiation. 					
Ingestion	May be harmful or fatal if swallowed. Aspiration of material into lungs can cause chemical pneumonitis which can be fatal. May cause central nervous system effects such as headache, nausea, vomiting and weakness.					

SECTION 11: TOXICOLOGICAL INFORMATION

Effects of chronic exposure..... 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. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and, in severe cases, for several years. Sensitization can be permanent. Prolonged or repeated exposure may cause lung damage, including a decrease in lung function. Prolonged vapour contact may cause conjunctivitis. Prolonged skin contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, sensitization. Chronic exposure to

organic solvents may cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal. Methyl Isobutyl Ketone is possibly carcinogenic to humans (IARC Group 2B). Cumene is

listed by IARC in Group 2B as a possible carcinogen. .

High level exposure to Xylene in some animal studies have been reported to cause health effects on the developing embryo/fetus. The relevance of this to humans is not known. Methyl Isobutyl Ketone 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

Environmental..... Do not allow to enter waters, waste water or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

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

Carcinogenicity of material.....

Reproductive effects.....

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.

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.

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

Do not ship by air without checking appropriate IATA regulations.
UN1263 - PAINT RELATED MATERIAL - Class 3 - Packing Group II - EmS: F-E S-E. IMDG Classification (Marine).....

Limited Quantity.

Marine Pollutant..... Potential marine pollutant.

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

On Domestic Substances List (DSL). CEPA status.....

TSCA inventory status..... All components are listed.

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

SARA Title III

Section 302 - extremely hazardous Isophorone Diisocyanate.

substances

Immediate health, delayed health, fire hazard. 1,2,4-Trimethylbenzene. Methyl Isobutyl Ketone. Section 311/312 - hazard categories....... Section 313.....

EPA hazardous air pollutants (HAPS)

40CFR63

California Proposition 65.....

Cumene. Hexamethylene diisocyanate. Methyl Isobutyl Ketone. Xylene.

***! 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. (Benzene (D)). (Methyl Isobutyl Ketone (D)). ***! WARNING: This product can expose you to chemicals including [see below], which are known to the State of California to cause cancer . (Benzene). (Cumene). (Methyl Isobutyl Ketone (C)). For more information, go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

REGULATORY AFFAIRS. Trivalent Data Systems Ltd. www.trivalent.com. Telephone number:..... (800) 387-7981.



SECTION 16: OTHER INFORMATION

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.

Review Date:.... 2021-11-15. Date of the latest revision of the safety ...

data sheet

2018-06-27