



MATERIAL SAFETY DATA SHEET

ALSAN 2K PRIMER

PART A

HMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #0056b3; color: white;"> <td style="text-align: center;">2</td> <td style="text-align: center;">HEALTH</td> </tr> <tr style="background-color: #ff0000; color: white;"> <td style="text-align: center;">1</td> <td style="text-align: center;">FLAMMABILITY</td> </tr> <tr style="background-color: #ff8c00; color: white;"> <td style="text-align: center;">1</td> <td style="text-align: center;">REACTIVITY</td> </tr> <tr style="background-color: #cccccc;"> <td style="text-align: center;">G</td> <td style="text-align: center;">PROTECTIVE EQUIPMENT</td> </tr> </table>	2	HEALTH	1	FLAMMABILITY	1	REACTIVITY	G	PROTECTIVE EQUIPMENT		<p>NOT REGULATED</p>
2	HEALTH									
1	FLAMMABILITY									
1	REACTIVITY									
G	PROTECTIVE EQUIPMENT									

SECTION II. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name:	Alsas 2K Primer Part A
Product number:	D31150
Use:	First component of two component urethane primer
Manufacturer:	Soprema, Inc. 1675 Haggerty Street Drummondville (Quebec) J2C 5P7 Canada 819-478-8163
Distributor:	Soprema, Inc. 310 Quadral Drive Wadsworth, Ohio 44281 UNITED STATES
In case of emergency:	SOPREMA (8:00am to 5:00pm - Eastern time): (800) 356-3521 CHEMTREC (USA) (24h.): (800) 424-9300 Point Center: (800) 222-1222

EMERGENCY OVERVIEW!!!

Harmful if inhaled. Causes eye, skin and respiratory irritation. This product contains isocyanates. May cause allergic skin reaction. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. Persons who are allergic to isocyanates should avoid contact with this product. Polymeric Diphenylmethane Diisocyanate has an extremely low vapor pressure making inhalation exposure very unlikely unless this product is heated or a mist or aerosol is formed by spraying or surface agitation.

SECTION II. COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS

Component	CAS#	% by weight
Polymeric diphenylmethane diisocyanate	9016-87-9	60 - 90
Modified methylene bisphenyl isocyanate	Proprietary	1 - 5
Propylene carbonate	108-32-7	10 - 30

SECTION III. POTENTIAL HEALTH EFFECTS*Effects of Short-Term (Acute) Exposure***INHALATION:**

Polymeric Diphenylmethane Diisocyanate has an extremely low vapor pressure making inhalation exposure very unlikely unless this product is heated or a mist or aerosol is formed by spraying or surface agitation. Harmful if inhaled. Breathing vapors may cause irritation of the nose, throat and upper respiratory tract. May cause allergic respiratory reaction in individuals who are sensitized to isocyanates. Symptoms may include eye irritation, sore throat, nasal discharge, coughing, difficulty breathing and a feeling of tightness in the chest. Fever, chills, headache and fatigue may also occur. Effects may be delayed. Severe exposures may cause inflammation of the lung (chemical pneumonitis), asthmatic symptoms with wheezing and accumulation of fluid in the lungs (pulmonary edema) which can be fatal.

SKIN CONTACT:

May cause irritation. May cause allergic skin reaction (rash, itching and swelling). Skin contact may also cause an allergic respiratory reaction as described under inhalation.

EYE CONTACT:

Causes irritation of the eyes with redness, pain and tearing. Corneal injury is possible.

INGESTION:

Ingestion may cause mouth, throat and gastrointestinal irritation. Based on animal data, this product is not expected to be toxic by ingestion.

*Effects of Long-Term (Chronic) Exposure***RESPIRATORY SENSITIZATION:**

Repeated inhalation may cause sensitization with allergic reaction or asthmatic symptoms upon future exposure. Sensitized individuals react to very low concentrations of MDI, below 0.001 ppm. Symptoms can occur immediately following exposures or can be delayed for several hours. Exposure to isocyanates can also cause hypersensitivity pneumonitis (an allergic lung disease) with symptoms of fever, shortness of breath, malaise, cough and chills. Chronic exposure to MDI may also cause impaired lung capacity. Cross sensitivity to other isocyanates may occur.

SKIN SENSITIZATION:

Repeated skin contact may cause sensitization with allergic reaction upon future exposure.

CARCINOGENICITY:

None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA. In inhalation studies with rats, an increased incidence of benign tumor of the lung (adenoma) and a single malignant tumor of the lung (adenocarcinoma) were observed in the highest MDI exposure group (6 mg/m³, 6 hours/day, 5 days/week for a lifetime). MDI administration did not change the distribution and incidence of tumors from those seen in the controls. The increased incidence of lung tumors is associated with prolonged respiratory irritation. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY:

None of the components are known to cause effects on the unborn child.

REPRODUCTIVE TOXICITY:

None of the components are known to cause effects on reproduction.

MUTAGENICITY:

None of the components are known to be mutagenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure. Individuals who are sensitive to isocyanates should not be exposed to this product.

ACUTE TOXICITY DATA:

Polymeric Diphenylmethane Diisocyanate: LD₅₀ oral rat >5000 mg/kg; LD₅₀ dermal rabbit >5000 mg/kg. LC₅₀ inhalation rat (respirable aerosol): 2240 mg/m³/1 hr., 490 mg/m³/4 hr.
Propylene Carbonate: LD₅₀ oral rat 34629 mg/kg, LD₅₀ dermal rat >23800 mg/kg, LC₅₀ inhalation rat >5000 mg/m³

SECTION IV. FIRST AID MEASURES	
SKIN	Wash skin thoroughly with soap and water after handling. Get medical attention if irritation or rash develop. Remove and launder contaminated clothing before reuse.
EYES	Immediately flush victim's eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Remove contact lenses if present after the first 5 minutes and continue flushing. Get immediate medical attention.
INHALATION	Remove victim to fresh air. If breathing is difficult, have qualified personnel administer oxygen. If breathing has stopped, administer CPR. Get immediate medical attention.
INGESTION	Do not induce vomiting. If the victim is conscious and alert, rinse the mouth with a small amount of water. Get immediate medical advice by calling a poison center or hospital emergency department.

SECTION V. FIRE-FIGHTING MEASURES	
Extinguishing media	Use carbon dioxide, dry chemical, water spray or foam. Do not use solid water stream.
Special fire fighting procedures	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Do not get water inside containers. Do not breathe combustion products. Do not release water from firefighting to sewers or waterways.
Unusual fire or explosion hazards	This product is combustible but will not burn readily. This material can burn if strongly heated.
Hazardous combustion products	Oxides of carbon and nitrogen, isocyanate vapors, hydrogen cyanide, and various hydrocarbons.

SECTION VI. ACCIDENTAL RELEASE MEASURES	
RELEASE OR SPILL: Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources. Ventilate the area. Stop leak if you can do so without risk. Contain spill and absorb with an inert, non-combustible absorbent material (dry earth, sand, commercial absorbent). Decontaminate the collected material and the spill area with a solution of 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for the ammonium hydroxide). Allow deactivated material to stand at least 30 minutes before shoveling into drums. Carefully sweep up or shovel, avoiding creating airborne dust. Place in an appropriate containers for disposal. Do not seal containers as chemical reaction that may generate carbon dioxide may rupture closed containers. Collect washings for proper disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.	

SECTION VII. HANDLING AND STORAGE	
HANDLING: Avoid contact with the eyes, skin and clothing. Do not breathe aerosols and vapors. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep away from excessive heat, flames and other sources of ignition. Persons with asthma or known sensitivity to isocyanates should not be exposed to this product. Keep product away from water and moisture. Do not reuse containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers. Do not cut, drill, weld, braze, etc. on or near containers, even empty containers. Residue inside containers may ignite explosively leading to injury or death.	
STORAGE: Store in a cool, dry, well ventilated area away from heat, direct sunlight, water, moisture and incompatible materials. Store in accordance with local and federal fire codes. Use proper labeling in accordance with 29CFR1910.1200 regulation. Improper storage or contamination of containerized product with water or other chemicals may result in a hazardous condition and rupture of containers.	

SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION	
EXPOSURE GUIDELINES	
Methylene bisphenyl isocyanate	0.005 ppm TWA ACGIH TLV; 0.02 ppm Ceiling OSHA PEL
Propylene carbonate	None established

SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

HANDS	Wear impervious gloves such as butyl rubber, neoprene or nitrile rubber to avoid skin contact. Contact your glove supplier for specific recommendations. Wear protective clothing as needed to avoid skin contact and prevent contamination of personal clothing.
RESPIRATORY	In operations where exposure limits are exceeded or exposure levels are unknown, a NIOSH or other authority approved supplied air respirator appropriate for the form and concentration of the contaminants should be used. Air-purifying respirators may be used under some conditions with a cartridge change schedule that is based on the expected airborne exposure levels. Since MDI is odorless, the odor threshold for MDI cannot be used to detect unsafe conditions. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.
EYES	Chemical safety goggles recommended.
ENGINEERING CONTROLS	Use with adequate ventilation to maintain exposure levels below the occupational exposure limits.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Liquid
COLOR	Light to brownish yellow liquid
ODOR	Slight musty odor; MDI is odorless
AUTO IGNITION TEMPERATURE	> 1112 °F (600 °C)
FLASH POINT	295 °F (146 °C)
VAPOR DENSITY	8.5
SPECIFIC GRAVITY	1.22 g/c ³
MELTING POINT	Not applicable
EVAPORATION RATE	Not available
BOILING POINT	> 300 °F (decomposes)
VAPOR PRESSURE	0.000004 mmHg
pH	Not applicable
SOLUBILITY IN WATER	Insoluble but may react
EXPLOSION DATA	Not sensitive to mechanical impact or static charge
VOC CONTENT	202 g/L (Part A + Part B)
OCTANOL/WATER COEFFICIENT	Not available

SECTION X. STABILITY AND REACTIVITY**STABILITY:**

Stable under recommended storage and handling conditions.

INCOMPATIBILITY:

Avoid excessive heat. Avoid freezing. Avoid contact with strong oxidizing agents, acids, bases, amines, alcohols, metal compounds such as organotin or organometallic catalysts, amides, phenols, mercaptans, ureas and surface active agents such as detergents. Avoid contact with water and moisture.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce carbon dioxide, carbon monoxide, oxides of nitrogen and hydrogen cyanide. Reacts with water and other incompatible materials generating heat and carbon dioxide which may rupture containers.

HAZARDOUS POLYMERIZATION:

This product may undergo an exothermic polymerization upon contact with water or other materials which react with this material such as alkalis, tertiary amines and metals compounds. Polymerization of containerized product may result in generation of significant heat and rupture of the container.

SECTION XI. TOXICOLOGICAL INFORMATION*Effects of Short-Term (Acute) Exposure***INHALATION:**

Polymeric Diphenylmethane Diisocyanate has an extremely low vapor pressure making inhalation exposure very unlikely unless this product is heated or a mist or aerosol is formed by spraying or surface agitation. Harmful if inhaled. Breathing vapors may cause irritation of the nose, throat and upper respiratory tract. May cause allergic respiratory reaction in individuals who are sensitized to isocyanates. Symptoms may include eye irritation, sore throat, nasal discharge, coughing, difficulty breathing and a feeling of tightness in the chest. Fever, chills, headache and fatigue may also occur. Effects may be delayed. Severe exposures may cause inflammation of the lung (chemical pneumonitis), asthmatic symptoms with wheezing and accumulation of fluid in the lungs (pulmonary edema) which can be fatal.

SKIN CONTACT:

May cause irritation. May cause allergic skin reaction (rash, itching and swelling). Skin contact may also cause an allergic respiratory reaction as described under inhalation.

EYE CONTACT:

Causes irritation of the eyes with redness, pain and tearing. Corneal injury is possible.

INGESTION:

Ingestion may cause mouth, throat and gastrointestinal irritation. Based on animal data, this product is not expected to be toxic by ingestion.

*Effects of Long-Term (Chronic) Exposure***RESPIRATORY SENSITIZATION:**

Repeated inhalation may cause sensitization with allergic reaction or asthmatic symptoms upon future exposure. Sensitized individuals react to very low concentrations of MDI, below 0.001 ppm. Symptoms can occur immediately following exposures or can be delayed for several hours. Exposure to isocyanates can also cause hypersensitivity pneumonitis (an allergic lung disease) with symptoms of fever, shortness of breath, malaise, cough and chills. Chronic exposure to MDI may also cause impaired lung capacity. Cross sensitivity to other isocyanates may occur.

SKIN SENSITIZATION:

Repeated skin contact may cause sensitization with allergic reaction upon future exposure.

CARCINOGENICITY:

None of the components is listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA. In inhalation studies with rats, an increased incidence of benign tumor of the lung (adenoma) and a single malignant tumor of the lung (adenocarcinoma) were observed in the highest MDI exposure group (6 mg/m³, 6 hours/day, 5 days/week for a lifetime). MDI administration did not change the distribution and incidence of tumors from those seen in the controls. The increased incidence of lung tumors is associated with prolonged respiratory irritation. In the absence of prolonged exposure to high concentrations leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY:

None of the components are known to cause effects on the unborn child.

REPRODUCTIVE TOXICITY:

None of the components are known to cause effects on reproduction.

MUTAGENICITY:

None of the components are known to be mutagenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure. Individuals who are sensitive to isocyanates should not be exposed to this product.

ACUTE TOXICITY DATA:

Polymeric Diphenylmethane Diisocyanate: LD₅₀ oral rat >5000 mg/kg; LD₅₀ dermal rabbit >5000 mg/kg. LC₅₀ inhalation rat (respirable aerosol): 2240 mg/m³/1 hr., 490 mg/m³/4 hr.

Propylene Carbonate: LD₅₀ oral rat 34629 mg/kg, LD₅₀ dermal rat >23800 mg/kg, LC₅₀ inhalation rat >5000 mg/m³

SECTION XII. ECOLOGICAL INFORMATION

Environmental effects:

The following ecotoxicity data is available for the components of this product. The environmental properties have not been thoroughly investigated. Releases to the environment should be avoided. However, it is unlikely that significant environmental exposure in the air or water will arise based on consideration of the production and use of the substance.

Immiscible with water, but will react with water to produce inert and non-biodegradable solids.

Polymeric Diphenylmethane Diisocyanate: EC₅₀ Daphnia Magna 1000 mg/L/24 hr. LD₅₀ zebra fish >1000 mg/L

This product is immiscible with water but will react with water to produce inert and non-biodegradable solids.

SECTION XIII. DISPOSAL CONSIDERATIONS

Waste disposal:

Dispose in accordance with local, state and federal environmental regulations.

SECTION XIV. TRANSPORTATION INFORMATION

Transportation of Dangerous Goods Description:

Proper Shipping Name: Not regulated when packaged in container with 5000 lbs or less.

UN Number: None

Hazard Class/Packing Group: Not applicable

Labels Required: None

Note: Packages containing more than 5000 lbs of product must be shipped under RQ provisions and named Environmentally Hazardous Substance, liquid, n.o.s. (Methylene Diphenyl Diisocyanate), 9, UN3082, PG III RQ.

SECTION XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product contains methylene diphenyl diisocyanate which has a RQ of 5000 lbs. Releases in excess of the RQ must be reported to the National Response Center. Many states have more stringent spill reporting requirements. Report spill in compliance with all federal, state and local requirements.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health, Chronic Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: Diisocyanate compounds 60-90%

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U. S. STATE REGULATIONS:

California Proposition 65: This product contains the following substances known to the State of California to cause cancer and/or reproductive harm: None

SECTION XVI. OTHER INFORMATION

Glossary:

ACGIH: American Conference of Governmental Industrial Hygienists
ANSI: American National Standards Institute
ASTM: American Society for Testing and Materials
CAS: Chemical Abstract Services
CFR: Code of Federal Regulations (United States)
CSA: Canadian Standardisation Association
DOT: Department of Transportation (United States)
DSL: Domestic Substances List (Canada)
EPA: Environmental Protection Agency (United States)
HMIS: Hazardous Material Information System
IARC: International Agency for Research on Cancer
LC50: (Lethal concentration₅₀) Concentration of a substance in air that causes death of 50% mortality of a defined animal population
LD50: (Lethal dose₅₀) Single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population.
NFPA: National Fire Protection Association (United States)
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety & Health Administration (United States)
PEL: Permissible Exposure Limit
RCRA: Resource Conservation and Recovery Act (United States)
RTECS: Registry of Toxic Effects of Chemical Substances
TDG: Transportation of Dangerous Goods
TLV: Threshold Limit Value
TWA: Time-weighted average
TSCA: Toxic Substances Control Act (United States)
WHMIS: Workplace Hazardous Materials Information System (Canada)

Reference:

Supplier MSDS

This MSDS has been prepared by: SOPREMA, INC.
For information: 800-543-3085

The Material Safety Data Sheets of SOPREMA are available on Internet at the following site: [HTTP://WWW.SOPREMA.US](http://www.soprema.us)

Justification of the update:

New MSDS.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



MATERIAL SAFETY DATA SHEET

ALSAN 2K PRIMER PART B

HMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #0056b3; color: white;"><td style="text-align: center;">1 HEALTH</td></tr> <tr style="background-color: #d62728; color: white;"><td style="text-align: center;">1 FLAMMABILITY</td></tr> <tr style="background-color: #ff7f0e; color: white;"><td style="text-align: center;">0 REACTIVITY</td></tr> <tr style="background-color: #ffffff; color: black;"><td style="text-align: center;">G PROTECTIVE EQUIPMENT</td></tr> </table>	1 HEALTH	1 FLAMMABILITY	0 REACTIVITY	G PROTECTIVE EQUIPMENT		<p style="font-size: 1.2em; font-weight: bold;">NOT REGULATED</p>
1 HEALTH						
1 FLAMMABILITY						
0 REACTIVITY						
G PROTECTIVE EQUIPMENT						

SECTION II. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name: Product number: Use: Manufacturer: Distributor: In case of emergency:	Alsan 2K Primer Part B D31250 Second component of two component urethane primer Soprema Inc. 1675 Haggerty Street Drummondville (Quebec) J2C 5P7 Canada 819-478-8163 Soprema, Inc. 310 Quadral Drive Wadsworth, Ohio 44281 UNITED STATES SOPREMA (8:00am to 5:00pm - Eastern time): (800) 356-3521 CHEMTREC (USA) (24h.): (800) 424-9300 Point Center: (800) 222-1222
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EMERGENCY OVERVIEW!!!

Causes eye irritation. May cause skin irritation on prolonged or repeated contact. Part A of this product contains isocyanates. May cause allergic skin reaction. May cause allergic or asthmatic symptoms or breathing difficulties if inhaled. Persons who are allergic to isocyanates should avoid contact with this product.

SECTION II. COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS

Component	CAS#	% by weight
Propylene carbonate	108-32-7	10 - 30
Xylene	1330-20-7	< 1

SECTION III. POTENTIAL HEALTH EFFECTS*Effects of Short-Term (Acute) Exposure***INHALATION:**

Breathing vapors or mists may cause minor irritation of the nose, throat and upper respiratory tract.

SKIN CONTACT:

May cause irritation on prolonged or repeated contact.

EYE CONTACT:

Causes irritation of the eyes with redness, pain and tearing.

INGESTION:

Ingestion may cause mouth, throat and gastrointestinal irritation.

*Effects of Long-Term (Chronic) Exposure***CHRONIC:**

This product contains a very small amount of xylene. Overexposure to xylene may cause damage to the nervous system, hearing, liver and kidneys.

CARCINOGENICITY:

None of the components present at 0.1% or greater are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY:

Xylene has been found to fetotoxic and teratogenic in studies with laboratory animals.

MUTAGENICITY:

None of the components are known to be mutagenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure. Individuals who are sensitive to isocyanates should not be exposed to this product.

ACUTE TOXICITY DATA:

Propylene Carbonate: LD₅₀ oral rat 34629 mg/kg, LD₅₀ dermal rat >23800 mg/kg, LC₅₀ inhalation rat >5000 mg/m³
Xylene: LD₅₀ oral rat 4300 mg/kg; LD₅₀ dermal rabbit >1700 mg/kg. LC₅₀ inhalation rat 5000 mg/L/4 hr.

SECTION IV. FIRST AID MEASURES

SKIN	Wash skin thoroughly with soap and water after handling. Get medical attention if irritation or rash develop. Remove and launder contaminated clothing before reuse.
EYES	Immediately flush victim's eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Remove contact lenses if present after the first 5 minutes and continue flushing. Get immediate medical attention.
INHALATION	Remove victim to fresh air. If breathing is difficult, have qualified personnel administer oxygen. If breathing has stopped, administer CPR. Get immediate medical attention.
INGESTION	Do not induce vomiting. If the victim is conscious and alert, rinse the mouth with a small amount of water. Get immediate medical advice by calling a poison center or hospital emergency department.

SECTION V. FIRE-FIGHTING MEASURES

Extinguishing media	Use carbon dioxide, dry chemical, water spray or foam. Do not use solid water stream.
Special fire fighting procedures	Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Do not get water inside containers. Do not breathe combustion products. Do not release water from firefighting to sewers or waterways.

SECTION V. FIRE-FIGHTING MEASURES

Unusual fire or explosion hazards	This product is combustible but will not burn readily. This material can burn if strongly heated.
Hazardous combustion products	Oxides of carbon and nitrogen and various hydrocarbons.

SECTION VI. ACCIDENTAL RELEASE MEASURES**RELEASE OR SPILL:**

Wear appropriate protective clothing as described in Section 8. Eliminate all ignition sources. Ventilate the area. Stop leak if you can do so without risk. Contain spill and absorb with an inert, non-combustible absorbent material (dry earth, sand, commercial absorbent). Carefully sweep up or shovel, avoiding creating airborne dust. Place in appropriate containers for disposal. Decontaminate the spill area with soap and water. Collect washings for proper disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

SECTION VII. HANDLING AND STORAGE**HANDLING:**

Avoid contact with the eyes, skin and clothing. Avoid breathing vapors. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep away from excessive heat, flames and other sources of ignition.

Do not reuse containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers. Do not cut, drill, weld, braze, etc. on or near containers, even empty containers. Residue inside containers may ignite explosively leading to injury or death.

STORAGE:

Store in a cool, dry, well ventilated area away from heat, direct sunlight, and incompatible materials. Store in accordance with local and federal fire codes. Use proper labeling in accordance with 29CFR1910.1200 regulation.

SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION**EXPOSURE GUIDELINES**

Propylene Carbonate	None established
Xylene	100 ppm TWA, 150 ppm STEL ACGIH TLV, 100 ppm TWA OSHA PEL
HANDS	Wear impervious gloves such as butyl rubber, neoprene or nitrile rubber to avoid skin contact. Contact your glove supplier for specific recommendations. Wear protective clothing as needed to avoid skin contact and prevent contamination of personal clothing.
RESPIRATORY	In operations where exposure limits are exceeded or exposure levels are unknown, a NIOSH or other authority approved supplied air respirator appropriate for the form and concentration of the contaminants should be used. Air-purifying respirators may be used under some conditions with a cartridge change schedule that is based on the expected airborne exposure levels. Since MDI is odorless, the odor threshold for MDI cannot be used to detect unsafe conditions. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 or other applicable regulations and good industrial hygiene practice.
EYES	Chemical safety goggles recommended.
ENGINEERING CONTROLS	Use with adequate ventilation to maintain exposure levels below the occupational exposure limits.

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Liquid
COLOR	Yellow to brownish liquid
ODOR	Not available
AUTO IGNITION TEMPERATURE	Not available
FLASH POINT	273 °F (134 °C)
VAPOR DENSITY	Heavier than air
SPECIFIC GRAVITY	1.97 g/c ³

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT	Not determined
EVAPORATION RATE	Not available
BOILING POINT	Not available
VAPOR PRESSURE	Not available
pH	Not applicable
SOLUBILITY IN WATER	Insoluble
EXPLOSION DATA	Not sensitive to mechanical impact or static charge
VOC CONTENT	202 g/L (Part A + Part B)

SECTION X. STABILITY AND REACTIVITY**STABILITY:**

Stable under recommended storage and handling conditions.

INCOMPATIBILITY:

Avoid excessive heat. Avoid contact with strong oxidizing agents, acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce oxides of carbon and nitrogen and various hydrocarbons.

HAZARDOUS POLYMERIZATION:

Will not occur.

SECTION III. TOXICOLOGICAL INFORMATION*Effects of Short-Term (Acute) Exposure***INHALATION:**

Breathing vapors or mists may cause minor irritation of the nose, throat and upper respiratory tract.

SKIN CONTACT:

May cause irritation on prolonged or repeated contact.

EYE CONTACT:

Causes irritation of the eyes with redness, pain and tearing.

INGESTION:

Ingestion may cause mouth, throat and gastrointestinal irritation.

*Effects of Long-Term (Chronic) Exposure***CHRONIC:**

This product contains a very small amount of xylene. Overexposure to xylene may cause damage to the nervous system, hearing, liver and kidneys.

CARCINOGENICITY:

None of the components present at 0.1% or greater are listed as a carcinogen or suspected carcinogen by IARC, NTP or OSHA.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY:

Xylene has been found to fetotoxic and teratogenic in studies with laboratory animals.

MUTAGENICITY:

None of the components are known to be mutagenic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Employees with pre-existing eye, skin and respiratory disease may be at increased risk from exposure. Individuals who are sensitive to isocyanates should not be exposed to this product.

ACUTE TOXICITY DATA:

Propylene Carbonate: LD₅₀ oral rat 34629 mg/kg, LD₅₀ dermal rat >23800 mg/kg, LC₅₀ inhalation rat >5000 mg/m³
Xylene: LD₅₀ oral rat 4300 mg/kg; LD₅₀ dermal rabbit >1700 mg/kg. LC₅₀ inhalation rat 5000 mg/L/4 hr.

SECTION XII. ECOLOGICAL INFORMATION**Environmental effects:**

The environmental properties have not been thoroughly investigated. Releases to the environment should be avoided.

SECTION XIII. DISPOSAL CONSIDERATIONS

Waste disposal:

Dispose in accordance with local, state and federal environmental regulations.

SECTION XIV. TRANSPORTATION INFORMATION

Transportation of Dangerous Goods Description:

Proper Shipping Name: Not regulated

UN Number: None

Hazard Class/Packing Group: Not applicable

Labels Required: None

Note: Packages containing more than 10000 lbs of product must be shipped under RQ provisions and named Environmentally Hazardous Substance, liquid, n.o.s. (contains Xylene), 9, UN3082, PG III RQ.

SECTION XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

CERCLA 103 Reportable Quantity: This product contains xylene which has a RQ of 100 lbs. Releases in excess of the RQ for the product of 10,000 lbs must be reported to the National Response Center. Many states have more stringent spill reporting requirements. Report spill in compliance with all federal, state and local requirements.

SARA TITLE III:

Hazard Category for Section 311/312: Acute Health, Chronic Health

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: Xylene (below deminimus concentration)

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

U. S. STATE REGULATIONS:

California Proposition 65: This product contains the following substances known to the State of California to cause cancer and/or reproductive harm: Ethyl benzene < 0.03%

SECTION XVI. OTHER INFORMATION

Glossary:

ACGIH: American Conference of Governmental Industrial Hygienists

ANSI: American National Standards Institute

ASTM: American Society for Testing and Materials

CAS: Chemical Abstract Services

CFR: Code of Federal Regulations (United States)

CSA: Canadian Standardisation Association

DOT: Department of Transportation (United States)

DSL: Domestic Substances List (Canada)

EPA: Environmental Protection Agency (United States)

HMIS: Hazardous Material Information System

IARC: International Agency for Research on Cancer

LC50: (Lethal concentration₅₀) Concentration of a substance in air that causes death of 50% mortality of a defined animal population

LD50: (Lethal dose₅₀) Single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population.

NFPA: National Fire Protection Association (United States)

NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

SECTION XVI. OTHER INFORMATION

Glossary:

OSHA: Occupational Safety & Health Administration (United States)
PEL: Permissible Exposure Limit
RCRA: Resource Conservation and Recovery Act (United States)
RTECS: Registry of Toxic Effects of Chemical Substances
TDG: Transportation of Dangerous Goods
TLV: Threshold Limit Value
TWA: Time-weighted average
TSCA: Toxic Substances Control Act (United States)
WHMIS: Workplace Hazardous Materials Information System (Canada)

Reference:

Supplier MSDS

This MSDS has been prepared by: SOPREMA, INC.
For information: 800-543-3085

The Material Safety Data Sheets of SOPREMA are available on Internet at the following site: [HTTP://WWW.SOPREMA.US](http://www.soprema.us)

Justification of the update:

New MSDS.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.