

Material Safety Data Sheet

Material Name: MONDO PU-100 - Part A

ID: SAH00186

*** Section 1 - Chemical Product and Company Identification ***

Material Name: MONDO PU-100 - Part A

Product Use

Adhesive

Manufacturer Information

USA and Puerto Rico

MAPEI

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

MAPEI

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). This product is combustible. This product is irritating to the eyes and skin. This product may cause sensitization by skin contact.

Hazard Statements

WARNING! COMBUSTIBLE. IRRITANT. ALLERGEN. Irritating to eyes and skin. May cause sensitization by skin contact. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material. Wear suitable gloves, eye/face protection, and respiratory protection if needed. Keep out of the reach of children.

Potential Health Effects: Eyes

This product is irritating to the eyes.

Potential Health Effects: Skin

This product is irritating to the skin. This product may cause an allergic skin reaction.

Potential Health Effects: Ingestion

No significant adverse effects are expected upon ingestion of the product.

Potential Health Effects: Inhalation

Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects

None identified.

HMIS Ratings: Health: 2* Fire: 2 Reactivity: 1 Pers. Prot.: Safety glasses, gloves, and N95 respirator if airborne concentrations exceed exposure limits

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

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*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
Proprietary	Alkyl phenol blocked polyisocyanate	10-30
25068-38-6	Epoxy Resin	5-10
141-78-6	Ethylacetate	1-5
84852-15-3	4-Nonylphenol, branched	1-5
14808-60-7	Crystalline silica	0.5-1.5

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

First Aid: Skin

Flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

Flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation

Immediately remove the affected person to fresh air. If symptoms persist, get medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

This product is combustible. Keep this product from heat, sparks, or open flame.

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical (preferred), foam, water.

Unsuitable Extinguishing Media

None identified.

Specific Hazards Arising From the Chemical

None identified.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective gear.

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

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Containment Procedures

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

Evacuation Procedures

None identified.

Special Procedures

Regulations vary. Consult local authorities before disposal.

*** Section 7 - Handling and Storage ***

Handling Procedures

Keep this product from heat, sparks, or open flame. Avoid getting this material into contact with your skin and eyes. Wash hands after handling and before eating. Keep out of the reach of children.

Storage Procedures

Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Keep out of sun.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Ethylacetate (141-78-6)

ACGIH:	400 ppm TWA
OSHA:	400 ppm TWA; 1400 mg/m3 TWA
NIOSH:	400 ppm TWA; 1400 mg/m3 TWA
Alberta:	400 ppm TWA; 1440 mg/m3 TWA
British Columbia:	150 ppm TWA
Manitoba:	400 ppm TWA
New Brunswick:	400 ppm TWA; 1440 mg/m3 TWA
NW Territories:	400 ppm TWA; 1441 mg/m3 TWA 500 ppm STEL; 1801 mg/m3 STEL
Nova Scotia:	400 ppm TWA
Nunavut:	400 ppm TWA; 1441 mg/m3 TWA 500 ppm STEL; 1801 mg/m3 STEL
Ontario:	400 ppm TWA
Quebec:	400 ppm TWAEV; 1440 mg/m3 TWAEV
Saskatchewan:	500 ppm STEL 400 ppm TWA
Yukon:	400 ppm STEL; 1400 mg/m3 STEL 400 ppm TWA; 1400 mg/m3 TWA

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Crystalline silica (14808-60-7)

ACGIH:	0.025 mg/m3 TWA (respirable fraction)
OSHA:	0.1 mg/m3 TWA (respirable dust)
NIOSH:	0.05 mg/m3 TWA (respirable dust)
Alberta:	0.025 mg/m3 TWA (respirable particulate)
British Columbia:	ACGIH Category A2 - Suspected Human Carcinogen; IARC Category 1 - Human Carcinogen 0.025 mg/m3 TWA (respirable)
Manitoba:	0.025 mg/m3 TWA (respirable fraction)
New Brunswick:	0.1 mg/m3 TWA (respirable fraction)
NW Territories:	0.1 mg/m3 TWA (respirable mass); 0.3 mg/m3 TWA (total mass)
Nova Scotia:	0.025 mg/m3 TWA (respirable fraction)
Nunavut:	0.1 mg/m3 TWA (respirable mass); 0.3 mg/m3 TWA (total mass)
Ontario:	0.10 mg/m3 TWA (respirable fraction) 0.10 mg/m3 TWA (designated substance regulation, respirable)
Quebec:	0.1 mg/m3 TWAEV (respirable dust)
Saskatchewan:	0.05 mg/m3 TWA (respirable fraction, listed under Silica - crystalline)
Yukon:	300 particle/mL TWA (listed under Silica)

Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields or goggles.

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Wear leather or other appropriate work gloves, if necessary for type of operation. May cause sensitization by skin contact.

Personal Protective Equipment: Respiratory

Not normally needed. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Laundry contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	White paste	Odor:	Slight odor
Physical State:	Paste	pH:	NA
Vapor Pressure:	NA	Vapor Density:	NA
Boiling Point:	>100° F	Melting Point:	NA
Solubility (H2O):	Dispersible	Specific Gravity:	1.46
Evaporation Rate:	Same as water	VOC:	21 g/L (mixture)
Octanol/H2O Coeff.:	NA	Flash Point:	104° F (40° C)
Flash Point Method:	CC	Upper Flammability Limit (UFL):	NA
Lower Flammability Limit (LFL):	NA	Burning Rate:	NA
Auto Ignition:	NA		

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Physical Properties: Additional Information

The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Keep away from heat, sparks, or open flame. Do not freeze.

Incompatibility

This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Epoxy Resin (25068-38-6)

Oral LD50 Rat 11400 mg/kg

Ethylacetate (141-78-6)

Oral LD50 Rat 5620 mg/kg; Dermal LD50 Rabbit >20 mL/kg; Dermal LD50 Rabbit >18000 mg/kg

4-Nonylphenol, branched (84852-15-3)

Oral LD50 Rat 580 mg/kg; Dermal LD50 Rabbit 2031 mg/kg

Crystalline silica (14808-60-7)

Oral LD50 Rat 500 mg/kg

Carcinogenicity

A: General Product Information

Exposure to quartz (the most stable and common form of crystalline silica) is responsible for the majority of clinically diagnosed silicosis. Silicosis is a fibronodular lung disease that occurs after occupational exposure to crystalline silica for 5 years or longer. Inhalation of quartz dusts may cause shortness of breath, limitation of chest expansion, dry cough, and a lessened capacity for work. Individuals with a pre-existing disease in, or a history of ailments involving the skin or respiratory tract, are at a greater risk of developing adverse health effects when exposed to this material. There may be a relationship between silicosis and certain cancers.

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B: Component Carcinogenicity

Crystalline silica (14808-60-7)

ACGIH:	A2 - Suspected Human Carcinogen
NIOSH:	potential occupational carcinogen
NTP:	Known Human Carcinogen (Select Carcinogen)
IARC:	Monograph 100C [in preparation] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources); Monograph 68 [1997] (Group 1 (carcinogenic to humans))

Sensitization

No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Ethylacetate (141-78-6)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	220-250 mg/L [flow-through]	NA
96 Hr LC50 Oncorhynchus mykiss	484 mg/L [flow-through]	NA
96 Hr LC50 Oncorhynchus mykiss	352-500 mg/L [semi-static]	NA
48 Hr EC50 Desmodesmus subspicatus	3300 mg/L	NA
48 Hr EC50 Daphnia magna	560 mg/L [Static]	NA

4-Nonylphenol, branched (84852-15-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	0.135 mg/L [flow-through]	NA
96 Hr LC50 Lepomis macrochirus	0.1351 mg/L [flow-through]	NA
96 Hr EC50 Pseudokirchneriella subcapitata	0.36 - 0.48 mg/L [static]	NA
72 Hr EC50 Pseudokirchneriella subcapitata	0.16 - 0.72 mg/L [static]	NA
72 Hr EC50 Desmodesmus subspicatus	1.3 mg/L	NA
48 Hr EC50 Daphnia magna	0.14 mg/L	NA

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

No additional information available.

B: Component Waste Numbers

Ethylacetate (141-78-6)

RCRA:	waste number U112 (Ignitable waste)
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Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: Adhesives

UN/NA #: UN1133 Hazard Class: 3 Packing Group: III

IATA Information

Shipping Name: Adhesives

UN #: UN1133 Hazard Class: 3 Packing Group: III

IMDG Information

Shipping Name: Adhesives

UN #: UN1133 Hazard Class: 3 Packing Group: III

TDG Information

Shipping Name: Adhesives

UN/NA #: UN1133 Hazard Class: 3 Packing Group: III

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

All of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Ethylacetate (141-78-6)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Ethylacetate	141-78-6	Yes	Yes	Yes	Yes	Yes	Yes
Crystalline silica	14808-60-7	No	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause cancer. This product contains a chemical known to the state of California to cause reproductive/developmental effects.

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Canadian WHMIS Information

A: General Product Information



B3



D2B

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Ethylacetate	141-78-6	1 %

Additional Regulatory Information

A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Epoxy Resin	25068-38-6	Yes	DSL	No
Ethylacetate	141-78-6	Yes	DSL	EINECS
4-Nonylphenol, branched	84852-15-3	Yes	DSL	EINECS
Crystalline silica	14808-60-7	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Reference

O1-2690-03

Other Information

Disclaimer: Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

MSDS History

2.0000 1.0000

This MSDS has been revised in the following section(s): Section 2 - Hazards Identification Section 3 - Composition / Information on Ingredients Section 8 - Exposure Controls / Personal Protection Section 9 - Physical & Chemical Properties Section 11 - Toxicological Information Section 16 - Other Information

Material Safety Data Sheet

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Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; BLV=Biological Limit Values; CAN = Canadian DSL and NDSL Inventories status; CAS = Chemical Abstracts Service; CC = Closed Cup; CFR = Code of Federal Regulations; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; g/L = grams per Liter; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; mg/kg = milligrams per kilogram; mg/L = milligrams per Liter; mg/m³ = milligrams per Cubic Meter; NA, N/A, S.O. = Not available or Not Applicable; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; OC = Open Cup; OSHA = Occupational Safety and Health Administration; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average; TWAEV = Time Weighted Average Exposure Value; WHMIS = Workplace Hazardous Materials Information System

End of Sheet SAH00186

Material Safety Data Sheet

Material Name: MONDO PU-100 - Part B

ID: SAH00187

*** Section 1 - Chemical Product and Company Identification ***

Material Name: MONDO PU-100 - Part B

Product Use

Flexible Setting Compound

Manufacturer Information

USA and Puerto Rico

MAPEI

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

MAPEI

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). Flammable liquid - may release vapors that form flammable mixtures at or above the flash point. Causes burns to the skin, eyes, and respiratory system. This product may cause sensitization by skin contact.

Hazard Statements

DANGER! CORROSIVE. EXTREMELY FLAMMABLE LIQUID AND VAPOR - VAPOR MAY CAUSE FLASH FIRE. Causes burns to the skin, eyes, and respiratory system. May cause sensitization by skin contact. Vapor harmful. Wear suitable gloves, eye/face protection, and respiratory protection if needed. Keep out of the reach of children.

Potential Health Effects: Eyes

This product is severely irritating to the eyes and may cause eye burns. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Potential Health Effects: Skin

This product is severely irritating to the skin and may cause burns. Prolonged contact with this product may cause allergic skin sensitization reactions.

Potential Health Effects: Ingestion

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

This product is severely irritating to the respiratory system and may cause burns. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. This product is an asphyxiant gas which can cause unconsciousness/death if OXYGEN levels are sufficiently reduced.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects

No information available for the product.

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HMIS Ratings: Health: 3 Fire: 3 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, synthetic apron, NIOSH respirator if airborne concentrations exceed exposure limits

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
2855-13-2	Isophorone diamine	30-60
108-88-3	Toluene	15-40
90-72-2	2,4,6-Tri(dimethylaminomethyl)phenol	10-30

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Get medical attention or advice. Flush eyes immediately with large amounts of water.

First Aid: Skin

Get medical attention or advice. Flush with large amounts of water.

First Aid: Ingestion

Get medical attention or advice. Flush out mouth with water.

First Aid: Inhalation

Immediately remove the affected person to fresh air. If symptoms persist, get medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Extremely dangerous fire and explosion hazard. Vapors may be ignited by flame, sparks or contact with any hot surface (light bulb or steam pipes) under normal atmospheric conditions. Forms explosive mixtures with air.

Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical (preferred), foam, water.

Unsuitable Extinguishing Media

None identified.

Specific Hazards Arising From the Chemical

None identified.

Fire Fighting Equipment/Instructions

Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

NFPA Ratings: Health: 3 Fire: 3 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Material Safety Data Sheet

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*** Section 6 - Accidental Release Measures ***

Personal Precautions

Eliminate ignition sources including sources of electrical, static or frictional sparks.

Containment Procedures

Contain the discharged material.

Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up. Keep out of the reach of children.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up.

*** Section 7 - Handling and Storage ***

Handling Procedures

Keep this product from heat, sparks, or open flame. Use only in well ventilated areas. Avoid breathing vapors or mists of this product. Avoid getting this material into contact with your skin and eyes. Keep out of the reach of children.

Storage Procedures

Do not handle or store near an open flame, heat or other sources of ignition. Store in a cool, dry, well-ventilated area. Keep the container tightly closed.

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*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Toluene (108-88-3)

ACGIH:	20 ppm TWA
OSHA:	200 ppm TWA 300 ppm Ceiling
NIOSH:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
Alberta:	50 ppm TWA; 188 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia:	Adverse reproductive effect 20 ppm TWA
Manitoba:	20 ppm TWA
New Brunswick:	50 ppm TWA; 188 mg/m3 TWA Skin - potential for cutaneous absorption
NW Territories:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Nova Scotia:	20 ppm TWA
Nunavut:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Ontario:	20 ppm TWAEV
Quebec:	50 ppm TWAEV; 188 mg/m3 TWAEV Skin designation
Saskatchewan:	60 ppm STEL 50 ppm TWA
Yukon:	Skin notation 150 ppm STEL; 560 mg/m3 STEL 100 ppm TWA; 375 mg/m3 TWA

Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear chemical goggles. Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Replace ripped or damaged gloves immediately. May cause sensitization by skin contact.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

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Appearance:	Amber liquid	Odor:	Amine odor
Physical State:	Liquid	pH:	NA
Vapor Pressure:	30	Vapor Density:	>1.0
Boiling Point:	41° F (5° C)	Melting Point:	NA
Solubility (H2O):	Insoluble	Specific Gravity:	1.00 - 1.30
Evaporation Rate:	<1.0	VOC:	21 g/L (mixture)
Octanol/H2O Coeff.:	NA	Flash Point:	57° F
Flash Point Method:	TAG-CC	Upper Flammability Limit (UFL):	NA
Lower Flammability Limit (LFL):	NA	Burning Rate:	NA
Auto Ignition:	NA		

Physical Properties: Additional Information

The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from heat, sparks, or open flame. Eliminate sources of ignition.

Incompatibility

This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Isophorone diamine (2855-13-2)

Oral LD50 Rat 1030 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

2,4,6-Tri(dimethylaminomethyl)phenol (90-72-2)

Oral LD50 Rat 1000 mg/kg; Dermal LD50 Rat 1280 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

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B: Component Carcinogenicity

Toluene (108-88-3)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Sensitization

This product may be sensitizing by prolonged skin contact.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Isophorone diamine (2855-13-2)

Test & Species		Conditions
96 Hr LC50 Leuciscus idus	110 mg/L [semi-static]	NA
72 Hr EC50 Desmodesmus subspicatus	37 mg/L	NA
24 Hr EC50 Daphnia magna	42 mg/L	NA
48 Hr EC50 Daphnia magna	14.6 - 21.5 mg/L [semi-static]	NA

Toluene (108-88-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	NA
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L [flow-through]	NA
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L [static]	NA
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi-static]	NA
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L [static]	NA
96 Hr LC50 Oryzias latipes	54 mg/L [static]	NA
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi-static]	NA
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L [static]	NA
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	NA
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	NA
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	NA
48 Hr EC50 Daphnia magna	11.5 mg/L	NA

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

No information available for the product.

Material Safety Data Sheet

Material Name: MONDO PU-100 - Part B

ID: SAH00187

B: Component Waste Numbers

Toluene (108-88-3)

RCRA:	waste number U220
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Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: Flammable liquids, corrosive, n.o.s. (Isophorone diamine , Toluene)

UN/NA #: UN2924 **Hazard Class:** 3 **Packing Group:** II

IATA Information

Shipping Name: Flammable liquid, corrosive, n.o.s. (Isophorone diamine , Toluene)

UN #: UN2924 **Hazard Class:** 3 **Packing Group:** II

IMDG Information

Shipping Name: Flammable liquid, corrosive, n.o.s. (Isophorone diamine , Toluene)

UN #: UN2924 **Hazard Class:** 3 **Packing Group:** II

TDG Information

Shipping Name: Flammable liquid, corrosive, n.o.s. (Isophorone diamine , Toluene)

UN/NA #: UN2924 **Hazard Class:** 3, (8) **Packing Group:** II

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

All of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Toluene (108-88-3)

SARA 313:	1.0 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Isophorone diamine	2855-13-2	No	No	No	Yes	No	No
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	Yes

Material Safety Data Sheet

Material Name: MONDO PU-100 - Part B

ID: SAH00187

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canadian WHMIS Information

A: General Product Information



B2



D2B



E

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Isophorone diamine	2855-13-2	1 %
Toluene	108-88-3	1 %

Additional Regulatory Information

A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Isophorone diamine	2855-13-2	Yes	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Reference

O1-1953-01

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

MSDS History

3.0000 2.0000

This MSDS has been revised in the following section(s): Section 2 - Hazards Identification Section 5 - Fire Fighting Measures Section 8 - Exposure Controls / Personal Protection Section 9 - Physical & Chemical Properties Section 11 - Toxicological Information Section 16 - Other Information

Material Safety Data Sheet

Material Name: MONDO PU-100 - Part B

ID: SAH00187

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; BLV=Biological Limit Values; CAN = Canadian DSL and NDSL Inventories status; CAS = Chemical Abstracts Service; CC = Closed Cup; CFR = Code of Federal Regulations; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; g/L = grams per Liter; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; mg/kg = milligrams per kilogram; mg/L = milligrams per Liter; mg/m3 = milligrams per Cubic Meter; NA, N/A, S.O. = Not available or Not Applicable; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; OC = Open Cup; OSHA = Occupational Safety and Health Administration; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average; TWAEV = Time Weighted Average Exposure Value; WHMIS = Workplace Hazardous Materials Information System

End of Sheet SAH00187