**Safety Data Sheet**
**MONDO PU-105 PART A**
Safety Data Sheet dated: 7/12/2017 - version 2
Date of first edition: 5/8/2017

## 1. Identification

**Product identifier**
Mixture identification:
Trade name: MONDO PU-105 PART A
**Recommended use and restrictions on use**
Recommended use: Polyurethane resins based compound
Restrictions on use: N.A.
**Supplier's details**
Company: MAPEI INC. (Canada)
2900 Francis-Hughes Avenue
H7L 3J5 - Laval - QC - CAN
Phone: 1-450-662-1212
**Emergency phone number**
(USA) CHEMTREC 1-800-424-9300
(Canada) CANUTEC 1-613-996-6666

## 2. Hazard identification

**Classification of the product**

| | |
|---|---|
| Skin Irrit. 2 | Causes skin irritation. |
| Eye Irrit. 2A | Causes serious eye irritation. |
| Skin Sens. 1B | May cause an allergic skin reaction. |
| Repr. 2 | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| Aquatic Acute 3 | Harmful to aquatic life. |
| Aquatic Chronic 2 | Toxic to aquatic life with long lasting effects. |

### Label elements

**Pictograms and Signal Words**

Warning

**Hazard statements:**

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H402 | Harmful to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precautionary statements:**

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260.A | Do not breathe dust or mist. |
| P264.2 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

| | |
|---|---|
| P302+P352.A | IF ON SKIN: Wash with plenty of water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P321.A | Specific treatment (see supplementary instructions on this label). |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501.A | Dispose of contents/container in accordance with applicable regulations. |

**Other hazards**

None

**Ingredient(s) with unknown acute toxicity**

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

## 3. Composition/information on ingredients

**Substances**

N.A.

**Mixtures**

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components

| Quantity | Name | Ident. Numb. | Classification |
|---|---|---|---|
| 10-20 % | Bisphenol A epoxy resin | CAS:25085-99-8 | Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Aquatic Chronic 2, H411; Skin Sens. 1B, H317 |
| 5-10 % | Alkyl epoxy resin | CAS:68609-97-2 | Skin Irrit. 2, H315; Skin Sens. 1, H317 |
| 2.5-5 % | Diisopropylnaphthalene | CAS:38640-62-9 | Asp. Tox. 1, H304; Aquatic Chronic 1, H410 |
| 1-2.5 % | Silica Sand | CAS:14808-60-7 | STOT RE 1, H372; Carc. 1A, H350 |
| 0.25-0.49 % | 4-Nonylphenol, branched | CAS:84852-15-3<br>EC:284-325-5<br>Index:601-053-00-8 | Repr. 2, H361; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Eye Dam. 1, H318; Muta. 2, H341; STOT SE 2, H371; Skin Corr. 1B, H314 |
| < 0,1 % | PHOSPHORIC ACID | CAS:7664-38-2 | Skin Corr. 1B, H314 |

## 4. First-aid measures

**Description of necessary first-aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

Skin Irritation

Erythema

**Indication of immediate medical attention and special treatment needed, if necessary**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## 5. Fire-fighting measures

**Suitable and unsuitable extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide ($CO_2$).

Unsuitable extinguishing media:

None in particular.

**Specific hazards arising from the hazardous product**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

**Special protective equipement and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

## 7. Handling and storage

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

**Conditions for safe storage, including any incompatibilities**

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

## 8. Exposure controls/personal protection

**Control parameters**

List of components with OEL value

| Component | OEL Type | Country | Ceiling | Long Term mg/m3 | Long Term ppm | Short Term mg/m3 | Short Term ppm | Behaviour | Note |
|---|---|---|---|---|---|---|---|---|---|
| Silica Sand | ACGIH | | | 0,025 | | | | | A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis; |
| PHOSPHORIC ACID | OSHA | | | 1 | | | | | |
| | ACGIH | | | 1 | | 3 | | | eye, skin and upper respiratory tract irritation; |
| | EU | | | 1 | | 2 | | Indicative | |

**Appropriate engineering controls**

N.A.

**Individual protection measures, such as personal protective equipment (PPE)**

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: Paste white

Odour: characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >94 °C (201 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.57 g/cm3

Solubility in water: Insoluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

### Other information

Substance groups relevant properties: N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

## 10. Stability and reactivity

### Reactivity

Stable under normal conditions

### Chemical stability

Data not Available.

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

## 11. Toxicological information

### Information on toxicological effects

**Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

**Toxicological information on main components of the mixture:**

| | | |
|---|---|---|
| Diisopropylnaphthalene | a) acute toxicity | LD50 Skin Rat > 4500 mg/kg |
| | | LC50 Inhalation Rat > 5,64000 mg/l 4h |
| | | LD50 Oral Rat = 3900 mg/kg |
| Silica Sand | a) acute toxicity | LD50 Oral Rat = 500 mg/kg |
| 4-Nonylphenol, branched | a) acute toxicity | LD50 Oral Rat 1300 mg/kg |

| | | |
|---|---|---|
| | | LD50 Skin Rabbit > 2000 mg/kg |
| PHOSPHORIC ACID | a) acute toxicity | LD50 Skin Rabbit = 2740 mg/kg |
| | | LC50 Inhalation Rat > 850 mg/m3 1h |
| | | LD50 Oral Rat = 1530 mg/kg |

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

**Substance(s) listed on the IARC Monographs:**

Silica Sand Group 1

**Substance(s) listed as OSHA Carcinogen(s):**

Silica Sand

**Substance(s) listed as NIOSH Carcinogen(s):**

Silica Sand

**Substance(s) listed on the NTP report on Carcinogens:**

Silica Sand

## 12. Ecological information

### Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

**List of components with eco-toxicological properties**

| Quantity | Component | Ident. Numb. | Ecotox Infos |
|---|---|---|---|
| 2.5-5 % | Diisopropylnaphthalene | CAS: 38640-62-9 | a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 1000 mg/L 96h |
| | | | a) Aquatic acute toxicity : LC50 Fish Oryzias latipes > 1000 mg/L 96h |
| 1-2.5 % | Silica Sand | CAS: 14808-60-7 | a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h |
| 0.25-0.49 % | 4-Nonylphenol, branched | CAS: 84852-15-3 - EINECS: 284-325-5 - 67-548-EC: 601-053-00-8 | LC50 Fish Pimephales promelas 0,135 mg/L 96h ,,Holcombe, G.W., Phipps, G.L., Knuth, M.L. and Felhaber, T. (1984) Environ. Pollut. (Series A) 35, 367-381 |
| | | | LC100 Fish Leuciscus idus 1,1 mg/L 48h ,,Huels study, 1988 (unpublished) |
| | | | LC50 Fish Leuciscus idus 0,95 mg/L 48h ,,Huels study, 1988 (unpublished) |
| | | | LOEC Fish Pimephales promelas 14 µg/L 33d ,,Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath |
| | | | NOEC Fish Pimephales promelas 7,4 µg/L 33d ,,Chemical Manufacturers Association (1991) Two environmental effects 4-Nonylphenol final reports 1. Chronic toxicity of Nonylphenol to the Mysid, Mysidopsis bahia: EnviroSystems Study Number 8977-CMA 2. Early life stage toxicity of Nonylphenol to the fath |
| | | | EC100 Daphnia Daphnia magna > 400 µg/L 48h ,,Huels report No. DK-522, 1992 (unpublished) |
| | | | EC0 Daphnia Daphnia magna < 100 µg/L 48h ,,Huels report No. DK-522, 1992 (unpublished) |
| | | | EC50 Daphnia Daphnia magna 140 µg/L 48h ,,Huels report No. DK-522, 1992 (unpublished) |
| | | | LOEC Daphnia Daphnia magna > 100 µg/L 21d ,,Huels report No. DL-143, 1992 (unpublished) |
| | | | NOEC Daphnia Daphnia magna 0,024 mg/L 21d ICI PLC (1991) Nonyl Phenol: Chronic Toxicity to Daphnia Magna Report No: BLS1319/B (Interim) BL4176/B (Final) |
| | | | EC90 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 3,2 mg/L 72h Huels study (unpublished) |
| | | | EC10 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 0,5 mg/L 72h Huels study (unpublished) |
| | | | EC50 Algae Scenedesmus subspicatus (Desmodesmus subspicatus) 1,3 mg/L 72h Huels study (unpublished) |

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 135 mg/L 96h IUCLID

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1351 mg/L 96h EPA

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 14 mg/L 48h IUCLID

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 36 mg/L 96h EPA

a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 16 mg/L 72h EPA

a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 13 mg/L 72h IUCLID

**Persistence and degradability**

N.A.

**Bioaccumulative potential**

N.A.

**Mobility in soil**

N.A.

**Other adverse effects**

N.A.

## 13. Disposal considerations

**Safe handling and methods for disposal**

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## 14. Transport information

**UN number**

TDG-UN number: UN3082

ADR-UN number: 3082

DOT-UN Number: UN3082

IATA-Un number: 3082

IMDG-Un number: 3082

**UN proper shipping name**

TDG-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Diisopropylnaphthalene)

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Diisopropylnaphthalene)

DOT-Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A epoxy resin - Diisopropylnaphthalene)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Diisopropylnaphthalene)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin - Diisopropylnaphthalene)

**Transport hazard class(es)**

TDG-Class: 9

ADR-Class: 9

DOT-Hazard Class: 9

IATA-Class: 9

IMDG-Class: 9

**Packing group**

TDG-Packing Group: III

ADR-Packing Group: III

DOT Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

**Environmental hazards**

Marine pollutant: Yes

Environmental Pollutant: N.A.

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

N.A.

**Special precautions in connection with transport or conveyance**

TDG:

TDG Special provisions: 16, 99

Department of Transportation (DOT):

DOT-Special Provision(s): 8, 146, 173, 335, IB3, T4, TP1
DOT-Label(s): 9
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR exempt: No
ADR-Label: 9
ADR-Hazard identification number: 90
ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 964
IATA-Cargo Aircraft: 964
IATA-Label: 9
IATA-Subrisk: -
IATA-Erg: 9L
IATA-Special Provisions: A97 A158

Sea (IMDG):

IMDG-Stowage Code: Category A
IMDG-Stowage Note: -
IMDG-Subrisk: -
IMDG-Special Provisions: 274 335
IMDG-Page: N/A
IMDG-Label: 9
IMDG-EMS: F-A, S-F
IMDG-MFAG: N/A

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## 15. Regulatory information

## Canada - Federal regulations

### DSL - Domestic Substances List

**DSL Inventory:**

All the substances are listed in the DSL.

### NDSL - Non Domestic Substances List

**NDSL Inventory:**

no substances listed

### NPRI - National Pollutant Release Inventory

**Substances listed in NPRI:**

no substances listed

## USA - Federal regulations

### TSCA - Toxic Substances Control Act

**TSCA inventory:**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

| | | |
|---|---|---|
| Bisphenol A epoxy resin | is listed in TSCA | Section 8b |
| Alkyl epoxy resin | is listed in TSCA | Section 8b |
| Diisopropylnaphthalene | is listed in TSCA | Section 8b |
| Silica Sand | is listed in TSCA | Section 8b |
| 4-Nonylphenol, branched | is listed in TSCA | Section 8b, Section 8a - PAIR |
| PHOSPHORIC ACID | is listed in TSCA | Section 8b |

### SARA - Superfund Amendments and Reauthorization Act

**Section 302 - Extremely Hazardous Substances:**

no substances listed

**Section 304 - Hazardous substances:**

PHOSPHORIC ACID

**Section 313 - Toxic chemical list:**

no substances listed

### CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

**Substance(s) listed under CERCLA:**

| | | | |
|---|---|---|---|
| PHOSPHORIC ACID | Reportable quantity: | 5000 | pounds |

### CAA - Clean Air Act

**CAA listed substances:**

no substances listed

### CWA - Clean Water Act

**CWA listed substances:**

| | | |
|---|---|---|
| PHOSPHORIC ACID | is listed in CWA | Section 311 |

## USA - State specific regulations

### California Proposition 65

**Substance(s) listed under California Proposition 65:**

| | |
|---|---|
| Silica Sand | Listed as carcinogen |

### Massachusetts Right to know

**Substance(s) listed under Massachusetts Right to know:**

Silica Sand

PHOSPHORIC ACID

### Pennsylvania Right to know

**Substance(s) listed under Pennsylvania Right to know:**

Silica Sand

PHOSPHORIC ACID

### New Jersey Right to know

**Substance(s) listed under New Jersey Right to know:**

Silica Sand

PHOSPHORIC ACID

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## 16. Other information

| Code | Description |
|---|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H341 | Suspected of causing genetic defects . |
| H350 | May cause cancer . |
| H361 | Suspected of damaging fertility or the unborn child <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H371 | May cause damage to organs <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. |
| H372 | Causes damage to organs through prolonged or repeated exposure . |
| H400 | Very toxic to aquatic life. |
| H402 | Harmful to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

Safety Data Sheet dated: 7/12/2017 - version 2

Product code: 2289

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.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 5. FIRE-FIGHTING MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

**Safety Data Sheet**
**MONDO PU-105 PART B**
Safety Data Sheet dated: 7/12/2017 - version 3
Date of first edition: 3/28/2017

## 1. Identification

**Product identifier**
Mixture identification:
Trade name: MONDO PU-105 PART B
**Recommended use and restrictions on use**
Recommended use: Hardener for polyurethane-based adhesives
Restrictions on use: N.A.
**Supplier's details**
Company: MAPEI INC. (Canada)
2900 Francis-Hughes Avenue
H7L 3J5 - Laval - QC - CAN
Phone: 1-450-662-1212
**Emergency phone number**
(USA) CHEMTREC 1-800-424-9300
(Canada) CANUTEC 1-613-996-6666

## 2. Hazard identification

**Classification of the product**

| | |
|---|---|
| Acute Tox. 4 | Harmful if swallowed. |
| Acute Tox. 4 | Harmful in contact with skin. |
| Skin Corr. 1B | Causes severe skin burns and eye damage. |
| Eye Dam. 1 | Causes serious eye damage. |
| Skin Sens. 1A | May cause an allergic skin reaction. |
| Aquatic Chronic 2 | Toxic to aquatic life with long lasting effects. |

### Label elements

**Pictograms and Signal Words**

Danger

**Hazard statements:**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Precautionary statements:**

| | |
|---|---|
| P260.1 | Do not breathe mist/vapours/spray. |
| P264.2 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301+P312.A | IF SWALLOWED: Call a POISON CENTER if you feel unwell. |
| P301+P330+P331 | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |

| | |
|---|---|
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310.A | Immediately call a POISON CENTER. |
| P321.A | Specific treatment (see supplementary instructions on this label). |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501.A | Dispose of contents/container in accordance with applicable regulations. |

**Other hazards**

None

**Ingredient(s) with unknown acute toxicity**

None

## 3. Composition/information on ingredients

**Substances**

N.A.

**Mixtures**

Hazardous components within the meaning of WHMIS 2015 and related classification:

List of components

| Quantity | Name | Ident. Numb. | Classification |
|---|---|---|---|
| 50-75 % | Isophorone diamine | CAS:2855-13-2 | Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H302; Acute Tox. 4, H312 |
| 10-20 % | 2,4,6-Tri(dimethylaminomethyl)phenol | CAS:90-72-2 | Skin Corr. 1B, H314; Skin Sens. 1A, H317; Aquatic Chronic 3, H412 |
| 5-10 % | Diisopropylnaphthalene | CAS:38640-62-9 | Asp. Tox. 1, H304; Aquatic Chronic 1, H410 |
| 5-10 % | Phenol, styrenated | CAS:61788-44-1 | Aquatic Chronic 2, H411 |
| 2.5-5 % | Bis[(dimethylamino)methyl]phenol | CAS:71074-89-0 | Skin Corr. 1B, H314 |

## 4. First-aid measures

**Description of necessary first-aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Give nothing to eat or drink.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

**Most important symptoms/effects, acute and delayed**

Eye irritation

Eye damages

Skin Irritation

Erythema

**Indication of immediate medical attention and special treatment needed, if necessary**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## 5. Fire-fighting measures

**Suitable and unsuitable extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide ($CO_2$).

Unsuitable extinguishing media:

None in particular.

**Specific hazards arising from the hazardous product**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

**Special protective equipement and precautions for fire-fighters**

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

**Methods and material for containment and cleaning up**

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

## 7. Handling and storage

**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

**Conditions for safe storage, including any incompatibilities**

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

## 8. Exposure controls/personal protection

**Control parameters**

No Data Available

**Appropriate engineering controls**

N.A.

**Individual protection measures, such as personal protective equipment (PPE)**

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use adequate protective respiratory equipment.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

Physical state: Liquid

Appearance and colour: yellow

Odour: like: Amines

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: >94 °C (201 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 0.95 g/cm3
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

**Other information**

Substance groups relevant properties: N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

## 10. Stability and reactivity

**Reactivity**

Stable under normal conditions

**Chemical stability**

Data not Available.

**Possibility of hazardous reactions**

None.

**Conditions to avoid**

Stable under normal conditions.

**Incompatible materials**

None in particular.

**Hazardous decomposition products**

None.

## 11. Toxicological information

### Information on toxicological effects

**Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

**Toxicological information on main components of the mixture:**

| | | |
|---|---|---|
| Isophorone diamine | a) acute toxicity | LD50 Oral Rat = 1030 mg/kg |
| 2,4, 6-Tri(dimethylaminomethyl) phenol | a) acute toxicity | LD50 Skin Rat = 1280 mg/kg |
| | | LD50 Oral Rat = 1000 mg/kg |
| Phenol, styrenated | a) acute toxicity | LD50 Skin Rabbit > 7940 mg/kg |
| | | LD50 Oral Rat = 2500 mg/kg |
| Diisopropylnaphthalene | a) acute toxicity | LD50 Skin Rat > 4500 mg/kg |
| | | LC50 Inhalation Rat > 5,64000 mg/l 4h |
| | | LD50 Oral Rat = 3900 mg/kg |

**If not differently specified, the information required in the regulation and listed below must be considered as N.A.**

a) acute toxicity

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

**Substance(s) listed on the IARC Monographs:**

None

**Substance(s) listed as OSHA Carcinogen(s):**

None

**Substance(s) listed as NIOSH Carcinogen(s):**

None

**Substance(s) listed on the NTP report on Carcinogens:**

None

## 12. Ecological information

### Ecotoxicity

Adopt good working practices, so that the product is not released into the environment.

**List of components with eco-toxicological properties**

| Quantity | Component | Ident. Numb. | Ecotox Infos |
|---|---|---|---|
| 50-75 % | Isophorone diamine | CAS: 2855-13-2 | a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 14,60000 mg/L 48h EPA |
| | | | a) Aquatic acute toxicity : EC50 Daphnia magna = 42,00000 mg/L - 24hr |
| | | | a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID |
| | | | a) Aquatic acute toxicity : EC50 Algae idus = 110,00000 mg/L 96h |
| 5-10 % | Diisopropylnaphthalene | CAS: 38640-62-9 | a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 1000 mg/L 96h |
| | | | a) Aquatic acute toxicity : LC50 Fish Oryzias latipes > 1000 mg/L 96h |

### Persistence and degradability

N.A.

### Bioaccumulative potential

N.A.

### Mobility in soil

N.A.

### Other adverse effects

N.A.

## 13. Disposal considerations

### Safe handling and methods for disposal

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

## 14. Transport information

### UN number

TDG-UN number: UN1760
ADR-UN number: 1760
DOT-UN Number: UN1760
IATA-Un number: 1760
IMDG-Un number: 1760

### UN proper shipping name

TDG-Shipping Name: CORROSIVE LIQUID, N.O.S. (Isophorone diamine - Diisopropylnaphthalene)
ADR-Shipping Name: CORROSIVE LIQUID, N.O.S. (Isophorone diamine - Diisopropylnaphthalene)
DOT-Proper Shipping Name: Corrosive liquids, n.o.s. (Isophorone diamine - Diisopropylnaphthalene)
IATA-Technical name: CORROSIVE LIQUID, N.O.S. (Isophorone diamine - Diisopropylnaphthalene)
IMDG-Technical name: CORROSIVE LIQUID, N.O.S. (Isophorone diamine - Diisopropylnaphthalene)

### Transport hazard class(es)

TDG-Class: 8

ADR-Class: 8

DOT-Hazard Class: 8

IATA-Class: 8

IMDG-Class: 8

**Packing group**

TDG-Packing Group: III

ADR-Packing Group: III

DOT Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

**Environmental hazards**

Marine pollutant: Yes

Environmental Pollutant: N.A.

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)**

N.A.

**Special precautions in connection with transport or conveyance**

TDG:

TDG Special provisions: 16

Department of Transportation (DOT):

DOT-Special Provision(s): IB3, T7, TP1, TP28

DOT-Label(s): 8

DOT-Symbol: N/A

DOT-Cargo Aircraft: N/A

DOT-Passenger Aircraft: N/A

DOT-Bulk: N/A

DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: 8

ADR-Hazard identification number: 80

ADR-Transport category (Tunnel restriction code): 3 (E)

Air (IATA):

IATA-Passenger Aircraft: 852

IATA-Cargo Aircraft: 856

IATA-Label: 8

IATA-Subrisk: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A SW2

IMDG-Stowage Note: -

IMDG-Subrisk: -

IMDG-Special Provisions: 223 274

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-B

IMDG-MFAG: N/A

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## 15. Regulatory information

## Canada - Federal regulations

**DSL - Domestic Substances List**

DSL Inventory:

All the substances are listed in the DSL.

**NDSL - Non Domestic Substances List**

NDSL Inventory:

no substances listed

**NPRI - National Pollutant Release Inventory**

Substances listed in NPRI:

no substances listed

## USA - Federal regulations

### TSCA - Toxic Substances Control Act

**TSCA inventory:**

All the components are listed on the TSCA inventory

**TSCA listed substances:**

| | | |
|---|---|---|
| Isophorone diamine | is listed in TSCA | Section 8b |
| 2,4,6-Tri(dimethylaminomethyl)phenol | is listed in TSCA | Section 8b |
| Diisopropylnaphthalene | is listed in TSCA | Section 8b |
| Phenol, styrenated | is listed in TSCA | Section 8b, Section 8a - PAIR |

### SARA - Superfund Amendments and Reauthorization Act

**Section 302 - Extremely Hazardous Substances:**

no substances listed

**Section 304 - Hazardous substances:**

no substances listed

**Section 313 - Toxic chemical list:**

no substances listed

### CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

**Substance(s) listed under CERCLA:**

no substances listed

### CAA - Clean Air Act

**CAA listed substances:**

no substances listed

### CWA - Clean Water Act

**CWA listed substances:**

no substances listed

## USA - State specific regulations

### California Proposition 65

**Substance(s) listed under California Proposition 65:**

no substances listed

### Massachusetts Right to know

**Substance(s) listed under Massachusetts Right to know:**

no substances listed

### Pennsylvania Right to know

**Substance(s) listed under Pennsylvania Right to know:**

no substances listed

### New Jersey Right to know

**Substance(s) listed under New Jersey Right to know:**

Isophorone diamine

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## 16. Other information

| Code | Description |
|---|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Safety Data Sheet dated: 7/12/2017 - version 3

Product code: 2402

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.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 5. FIRE-FIGHTING MEASURES
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 16. OTHER INFORMATION