

Safety Data Sheet PLANISEAL PMB

Safety Data Sheet dated: 1/18/2018 - version 4

Date of first edition: 11/17/2016

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: PLANISEAL PMB

Recommended use of the chemical and restrictions on use

Recommended use: ES08421 Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico) 1144 East Newport Center Drive 33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300 (Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION





Classification of the chemical

Acute Tox. 4 Harmful if inhaled.

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2A Causes serious eye irritation.

Resp. Sens. 1 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 May cause an allergic skin reaction.

Carc. 2 Suspected of causing cancer if inhaled.

Repr. 1B May damage fertility. May damage the unborn child.

STOT SE 3 May cause respiratory irritation.

STOT RE 2 May cause damage to organs through prolonged or repeated exposure if inhaled.

Label elements

Pictograms and Signal Words



Danger

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 1 of 10

| | , 3 , , , 3 |
|-----------------|--|
| H373.A | May cause damage to organs through prolonged or repeated exposure if inhaled. |
| Precautionary s | statements: |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260.1 | Do not breathe mist/vapours/spray. |
| P264.2 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P284 | [In case of inadequate ventilation] wear respiratory protection. |
| P302+P352.A | IF ON SKIN: Wash with plenty of water. |
| P304+P341 | IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P33 | 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. |
| P312.A | Call a POISON CENTER if you feel unwell. |
| 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. |
| P342+P311.B | If experiencing respiratory symptoms: Call a doctor. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501.A | Dispose of contents/container in accordance with applicable regulations. |
| | |

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

Suspected of causing cancer if inhaled.

May damage fertility. May damage the unborn child.

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

H351.A

H360FD

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

| Quantity | Name | Ident. Numb. | Classification |
|----------|--|---------------|--|
| 25-50 % | 4,4'-Methylenediphenyl diisocyanate | CAS:101-68-8 | Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; STOT RE 2, H373; Carc. 2, H351; Resp. Sens. 1, H334; Skin Sens. 1, H317 |
| 20-25 % | DIPHENYLMETHANE-2,4- DIISOCYANATE | CAS:5873-54-1 | Eye Irrit. 2A, H319; Skin Irrit. 2, H315; STOT SE 3, H335; Resp. Sens. 1, H334; Acute Tox. 4, H332; STOT RE 2, H373; Skin Sens. 1, H317 |
| 2.5-5 % | Polymethylene polyphenylene isocyanate | CAS:9016-87-9 | Acute Tox. 4, H332; STOT SE 3, H335; Skin Irrit. 2, H315; STOT RE 2, H373; Eye Irrit. 2A, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317 |

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 2 of 10

2.5-5 % 2,2-METHYLENEDIPHENYL

DIISOCYANATE

CAS:2536-05-2 STOT RE 2, H373; Eye Irrit. 2A,

H319; STOT SE 3, H335; Skin Irrit. 2, H315; Acute Tox. 4, H332; Resp. Sens. 1, H334; Skin Sens.

1, H317

0.25-0.49 % Propylene glycol monomethyl ether

acetate

CAS:108-65-6

Flam. Liq. 3, H226; Repr. 1B, H360; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H336

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Obtain medical attention if skin related symptoms persist.

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:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

Indication of any immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

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 equipment 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

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 3 of 10

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

Do not use on extensive surface areas in premises where there are occupants.

Use localized ventilation system.

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.

Contaminated 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.

Always keep in a well ventilated place.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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 |
|---|-------------|---------|---------|--------------------|------------------|------------------------|-------------------|------------|--|
| 4,4'- Methylenediphenyl diisocyanate | ACGIH | | | | 0,005 | | | | respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI)); |
| | OSHA | | С | | | 0,2 | 0,02 | | |
| Propylene glycol monomethyl ether acetate | EU | | | 275 | 50 | 550 | 100 | Indicative | Possibility of significant uptake through the skin; |

Appropriate engineering controls: N.A.

Individual protection measures

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.

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 4 of 10

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: light yellow

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: 1.20 g/cm3
Solubility in water: Reacts
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:

4,4'-Methylenediphenyl a) acute toxicity

diisocyanate

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 5 of 10

LC50 Inhalation Rat = 369 mg/m3 4h

Polymethylene a) acute toxicity LC50 Inhalation Rat = 490 mg/m3 4h

polyphenylene isocyanate

Propylene glycol monomethyl ether acetate

a) acute toxicity

LD50 Skin Rabbit > 5 g/kg

LD50 Oral Rat = 8532 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:

4,4'-Methylenediphenyl Group 3

diisocyanate

Polymethylene polyphenylene Group 3

isocyanate

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

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

None

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

None

12. ECOLOGICAL INFORMATION

Toxicity

Quantity

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

Eco-Toxicological Information:

List of components with eco-toxicological properties Component

| Quantity | Component | Ident. Numb. | ECOLOX TIMOS |
|-------------|---|---------------|---|
| 0.25-0.49 % | Propylene glycol monomethyl ether acetate | CAS: 108-65-6 | a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 161 mg/l IUCLID |

Ecotoy Infos

Ident Numb

a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna > 500 mg/L **IUCLID**

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

Date 3/6/2019 **Production Name** PLANISEAL PMB Page n. 6 of 10

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

14. TRANSPORT INFORMATION

UN number

ADR-UN number: N/A
DOT-UN Number: N/A
IATA-Un number: N/A
IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A
DOT-Proper Shipping Name: N/A
IATA-Technical name: N/A
IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A
DOT-Hazard Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A DOT-Packing group: N/A IATA-Packing group: N/A IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A

DOT-Label(s): N/A
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: N/A

ADR-Hazard identification number: N/A

ADR-Transport category (Tunnel restriction code): N/A

Air (IATA):

IATA-Passenger Aircraft: N/A IATA-Cargo Aircraft: N/A

IATA-Label: N/A IATA-Subrisk: N/A IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A
IMDG-Subrisk: N/A

IMDG-Special Provisions: N/A

IMDG-Page: N/A

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 7 of 10

IMDG-Label: N/A IMDG-EMS: N/A IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

4,4'-Methylenediphenyl

is listed in TSCA Section 8b Section 8a - PAIR

diisocyanate

DIPHENYLMETHANE-2,4-

DIISOCYANATE

is listed in TSCA Section 8b Section 8a - PAIR

Polymethylene polyphenylene

isocyanate

is listed in TSCA Section 8b

2,2-METHYLENEDIPHENYL

DIISOCYANATE

is listed in TSCA Section 8b

Propylene glycol monomethyl

is listed in TSCA Section 8b Section 8a - PAIR

ether acetate

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

4,4'-Methylenediphenyl diisocyanate

Section 313 - Toxic chemical list:

4,4'-Methylenediphenyl diisocyanate

Polymethylene polyphenylene isocyanate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act Substance(s) listed under CERCLA:

4,4'-Methylenediphenyl diisocyanate Reportable quantity: 5000 pounds

CAA - Clean Air Act

CAA listed substances:

4,4'-Methylenediphenyl is listed in CAA Section 112(b) - HAP Section 112(b) - HON

diisocyanate

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:

4,4'-Methylenediphenyl diisocyanate

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

4,4'-Methylenediphenyl diisocyanate

New Jersey Right to know

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

4,4'-Methylenediphenyl diisocyanate

Polymethylene polyphenylene isocyanate

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 8 of 10

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

16. OTHER INFORMATION

Code Description H226 Flammable liquid and vapour. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. H334 H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer. H351.A Suspected of causing cancer if inhaled. May damage fertility or the unborn child . H360

H360FD May damage fertility. May damage the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure .

H373.A May cause damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 1/18/2018 - version 4

Product code: 9024385

Additional classification information





HMIS Health: 1 = Slight

HMIS Health - Is health hazard chronic? Yes HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 1 = Slight

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 1 = Slight

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 1 = Slight NFPA Special Risk: N.A.

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.

Date 3/6/2019 **Production Name** PLANISEAL PMB Page n. 9 of 10 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
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

Date 3/6/2019 Production Name PLANISEAL PMB Page n. 10 of 10