

Safety Data Sheet PLANISEAL VS PART B

Safety Data Sheet dated: 01/30/2020 - version 5

Date of first edition: 05/26/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: PLANISEAL VS PART B

Recommended use of the chemical and restrictions on use

Recommended use: Hardener for epoxy products

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 swallowed.

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.

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

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

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Label elements

Pictograms and Signal Words



Danger

Hazard statements:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H360FD May damage fertility. May damage the unborn child.

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

H412 Harmful 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 Do not breathe mist/vapours/spray.
P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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P272 Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. P273 Wear protective gloves/protective clothing/eye protection/face protection. P280 P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell. P301+P330+P33 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P35 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+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. P310 Immediately call a POISON CENTER. P321 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.

P405 Store locked up.

P501 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:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

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

List of components

Quantity	Name	ident. Numb.	Classification	Registration Number
25-50 %	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	
20-25 %	Benzyl alcohol	CAS:100-51-6	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2A, H319	
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 %	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 %	Triethylene tetramine	CAS:112-24-3	Skin Sens. 1, H317; Aquatic Chronic 3, H412; Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314	
2.5-5 %	Copolymer of Benzenamine and Formaldehyde, Hydrogenated	CAS:135108-88- 2	Acute Tox. 4, H302; STOT RE 2, H373; Aquatic Chronic 3, H412; Skin Corr. 1C, H314; Skin Sens. 1, H317	
2.5-5 %	Aminoethylpiperazine	CAS:140-31-8	Acute Tox. 3, H311; Skin Corr. 1B, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Repr. 1B, H360	
1-2.5 %	Bis[(dimethylamino)methyl]phenol	CAS:71074-89-0	Skin Corr. 1B, H314	

Ident Numb Classification

Registration Number

4. FIRST AID MEASURES

Description of first aid measures

In case of skin contact:

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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:

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 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

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.

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. Incompatible materials:

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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

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: amber

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: 1.00 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.

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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

Benzyl alcohol

a) acute toxicity

a) acute toxicity

LD50 Skin Rabbit = 2000,00000 mg/kg

LC50 Inhalation Rat = 8,80000 mg/l 4h

LD50 Oral Rat = 1230 mg/kg

2,4,6-

Tri(dimethylaminomethyl)

LD50 Skin Rat = 1280 mg/kg

phenol

LD50 Oral Rat = 1000 mg/kg

Triethylene tetramine

a) acute toxicity

LD50 Skin Rabbit = 550 mg/kg LD50 Oral Rat = 2500 mg/kg

Aminoethylpiperazine

a) acute toxicity

LD50 Skin Rabbit = $880 \mu L/kg$ LD50 Oral Rat = 2140 mg/kg

LD50 Oral Rat = 2140 μ L/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
- k) Toxicological kinetics, metabolism and distribution information
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

None

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

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

None

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

12. ECOLOGICAL INFORMATION

Toxicity

Date 1/31/2020 **Production Name** PLANISEAL VS PART B Page n. 5 of 10 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	Ident. Numb.	Ecotox Infos			
Isophorone diamine	CAS: 2855-13-2	a) Aquatic acute toxicity : EPA	EC50 Daphnia Daphnia magna 14,60000 mg/L 48h		
		a) Aquatic acute toxicity :	EC50 Daphnia magna = 42,00000 mg/L - 24hr		
		a) Aquatic acute toxicity : 72h IUCLID	EC50 Algae Desmodesmus subspicatus = 37 mg/L		
		a) Aquatic acute toxicity :	EC50 Algae idus = 110,00000 mg/L 96h		
Benzyl alcohol	CAS: 100-51-6	a) Aquatic acute toxicity : EPA	LC50 Fish Pimephales promelas = 460 mg/L 96h		
		a) Aquatic acute toxicity :	LC50 Fish Lepomis macrochirus = 10 mg/L 96h EPA		
		a) Aquatic acute toxicity:	EC50 Daphnia water flea = 23 mg/L 48h		
Triethylene tetramine	CAS: 112-24-3	a) Aquatic acute toxicity : IUCLID	LC50 Fish Poecilia reticulata = 570 mg/L 96h		
		a) Aquatic acute toxicity : IUCLID	LC50 Fish Pimephales promelas = 495 mg/L 96h		
		a) Aquatic acute toxicity : IUCLID	EC50 Daphnia Daphnia magna = 311 mg/L 48h		
		a) Aquatic acute toxicity : mg/L 72h IUCLID	EC50 Algae Desmodesmus subspicatus = 2,50000		
		a) Aquatic acute toxicity : mg/L 72h IUCLID	EC50 Algae Pseudokirchneriella subcapitata = 20		
		a) Aquatic acute toxicity : 3,70000 mg/L 96h EPA	EC50 Algae Pseudokirchneriella subcapitata =		
Aminoethylpiperazine	CAS: 140-31-8	a) Aquatic acute toxicity :	LC50 Fish Pimephales promelas 1950 mg/L 96h EPA		
		a) Aquatic acute toxicity : IUCLID	LC50 Fish Poecilia reticulata > 1000 mg/L 96h		
		a) Aquatic acute toxicity : IUCLID	LC50 Fish Oncorhynchus mykiss >= 100 mg/L 96h		
		a) Aquatic acute toxicity : IUCLID	EC50 Daphnia Daphnia magna = 32 mg/L 48h		
		a) Aquatic acute toxicity : mg/L 72h IUCLID	EC50 Algae Pseudokirchneriella subcapitata = 495		
Persistence and degradability					

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

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: 2735 DOT-UN Number: UN2735 IATA-Un number: 2735

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IMDG-Un number: 2735

UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine -

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

DOT-Proper Shipping Name: Amines, liquid, corrosive, n.o.s., or Polyamines, liquid, corrosive, n.o.s. (Isophorone diamine - 2,4,6-

Tri(dimethylaminomethyl)phenol)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine -

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

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Isophorone diamine -

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

Transport hazard class(es)

ADR-Class: 8

DOT-Hazard Class: 8

IATA-Class: 8
IMDG-Class: 8

Packing group

ADR-Packing Group: II DOT-Packing group: II IATA-Packing group: II IMDG-Packing group: II

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): B2, IB2, T11, TP1, TP27

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): 2 (E)

Air (IATA):

IATA-Passenger Aircraft: 851 IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisions: A3 A803

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: "Separated from" acids.

IMDG-Subsidiary hazards: IMDG-Special Provisions: 274

IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-A, S-B
IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

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TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Isophorone diamine is listed in TSCA Section 8b
Benzyl alcohol is listed in TSCA Section 8b
2,4,6- is listed in TSCA Section 8b

Tri(dimethylaminomethyl)phenol

Bisphenol A epoxy resin is listed in TSCA Section 8b Triethylene tetramine is listed in TSCA Section 8b Copolymer of Benzenamine and is listed in TSCA Section 8b

Formaldehyde, Hydrogenated

Aminoethylpiperazine is listed in TSCA Section 8b

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:

Benzyl alcohol is listed in CAA Section 112(b) - HON

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:

Benzvl alcohol

Triethylene tetramine

Aminoethylpiperazine

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Benzyl alcohol

Triethylene tetramine

Aminoethylpiperazine

New Jersey Right to know

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

Isophorone diamine

Triethylene tetramine

Aminoethylpiperazine

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

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NPRI - National Pollutant Release Inventory Substances listed in NPRI:

no substances listed

16. OTHER INFORMATION

Code	Description			
H302	Harmful if swallowed.			
H311	Toxic in contact with skin.			
H312	Harmful in contact with skin.			
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.			
H332	Harmful if inhaled.			
H360	May damage fertility or the unborn child .			
H360FD	May damage fertility. May damage the unborn child.			
H373	May cause damage to organs through prolonged or repeated exposure .			
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.			
H411	Toxic to aquatic life with long lasting effects.			
H412	Harmful to aquatic life with long lasting effects.			
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Product code: 2814

Additional classification information



HMIS Health: 3 = Serious

HMIS Health - Is health hazard chronic? No HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = Minimal

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

NFPA Health: 3 = Serious

NFPA Flammability: 1 = Combustible if heated

NFPA Reactivity: 0 = Minimal 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.

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.

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INCI: International Nomenclature of Cosmetic Ingredients.

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

 $\label{lem:GefStoffVO: Ordinance on Hazardous Substances, Germany.} \\$

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
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

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