1: Identification

Product identifier

Mixture identification:

Trade name: PLANISEAL VS MY /B

Trade code: 9024354

Registration Number N/A

Recommended use of the chemical and restrictions on use

Recommended use: Primer

Uses advised against: Not available

Supplier's details

Company: MAPEI MALAYSIA Sdn Bhd

Lot 754, Lengkok Emas 1, Kawasan Perindustrian Nilai, 71800 Negeri Sembilan, Malaysia

T. +606 799 8028 (Mon-Fri 8.30am to 5.30pm) - F. +606 799 8191

sicurezza@mapei.it - www.mapei.com.my

Emergency phone number

999

2: Hazard identification

Classification of the substance or mixture

Classification of the chemical

Acute Tox. 4	Harmful if swallowed.
Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

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.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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	Immediately call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P501	Dispose of contents/container in accordance with applicable regulations.

Other hazards which do not result in a classification

No other hazards

3: Composition/information on ingredients

Substances

Not available

Mixtures

Mixture identification: PLANISEAL VS MY /B

Hazardous components within the meaning of the GHS regulation and related classification:

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS:2855-13-2 EC:220-666-8 Index:612-067-00-9	Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119514687-32-xxxx
≥20 - <25 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2, H319	01-2119492630-38-XXXX
≥10 - <20 %	Reaction products of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	CAS:38294-64-3, 68609-08-5 EC:500-101-4	Skin Corr. 1B, H314; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119965165-33-000
≥10 - <20 %	2,4,6-tris(dimethylaminomethyl)phenol	CAS:90-72-2 EC:202-013-9 Index:603-069-00-0	Skin Corr. 1C, H314; Eye Dam. 1, H318; Acute Tox. 4, H302	01-2119560597-27-XXXX
≥5 - <10 %	2-Methylpentane-1,5-diamine	CAS:15520-10-2 EC:239-556-6	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Corr. 1A, H314; Eye Dam. 1, H318; STOT SE 3, H335	01-2119976310-41-XXXX
≥1 - <2.5 %	2-piperazin-1-ylethylamine	CAS:140-31-8 EC:205-411-0 Index:612-105-00-4	Acute Tox. 3, H311; Repr. 2, H361; STOT RE 1, H372; Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119471486-30
≥1 - <2.5 %	4-tert-butylphenol	CAS:98-54-4 EC:202-679-0 Index:604-090-00-8	Skin Irrit. 2, H315; Eye Dam. 1, H318; Repr. 2, H361f; Aquatic Chronic 1, H410	01-2119489419-21-XXXX

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).

Treatment:

(see paragraph 4.1)

5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Unsuitable extinguishing media:

None in particular.

Special hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: Not available

Explosive properties: Not available

Oxidizing properties: Not available

Special protective actions 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.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

Methods and material for containment and cleaning up

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

Retain contaminated washing water and dispose it.

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.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8: Exposure controls/personal protection

Control parameters

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency Remark
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	0.06 mg/l	Fresh Water	
		0.006 mg/l	Marine water	
		0.23 mg/l	Intermittent release	
		5.784 mg/kg	Freshwater sediments	
		0.578 mg/kg	Marine water sediments	
		1.121 mg/kg	Soil	
		3.18 mg/l	Microorganisms in sewage treatments	
benzyl alcohol	100-51-6	1 mg/l	Fresh Water	
		0.1 mg/l	Marine water	
		5.27 mg/kg	Freshwater sediments	
		0.527 mg/kg	Marine water sediments	
		39 mg/l	Microorganisms in sewage treatments	
		0.45 mg/kg	Soil	
		2.3 mg/l	Intermittent release	
2-Methylpentane-1,5-diamine	15520-10-2	0.042 mg/l	Marine water	
		0.42 mg/l	Fresh Water	
		0.42 mg/l	Intermittent release	
2-piperazin-1-ylethylamine	140-31-8	0.058 mg/l	Fresh Water	
		0.0058 mg/l	Marine water	
		0.58 mg/l	Intermittent release	
		215 mg/kg	Freshwater sediments	
		21.5 mg/kg	Marine water sediments	
		42.9 mg/kg	Soil	
		250 mg/l	Microorganisms in sewage treatments	

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency Remark
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	20.1 mg/m3			Human Inhalation	
benzyl alcohol	100-51-6			20 mg/kg	Human Oral	Short Term, systemic effects
				4 mg/kg	Human Oral	Long Term, systemic effects
		110 mg/m3		27 mg/m3	Human Inhalation	Short Term, systemic effects

		22 mg/m3	5.4 mg/m3	Human Inhalation	Long Term, systemic effects
		40 mg/kg	20 mg/kg	Human Dermal	Short Term, systemic effects
		8 mg/kg	4 mg/kg	Human Dermal	Long Term, systemic effects
2,4,6-tris (dimethylaminomethyl) phenol	90-72-2	0.31 mg/m3		Human Inhalation	Long Term, systemic effects
2-Methylpentane-1,5-diamine	15520-10-2	1.5 mg/kg		Human Dermal	Long Term (repeated)
		0.25 mg/m3		Human Inhalation	Long Term (repeated)
		0.5 mg/m3		Human Inhalation	Short Term (acute)
2-piperazin-1-ylethylamine	140-31-8	20 mg/kg	10 mg/kg	Human Dermal	Short Term, systemic effects
		0.04 mg/cm2	0.02 mg/cm2	Human Dermal	Short Term, local effects
		3.3 mg/kg	1.7 mg/kg	Human Dermal	Long Term, systemic effects
		3.6 mg/m3	0.9 mg/m3	Human Inhalation	Long Term, systemic effects
		0.006 mg/cm2	0.003 mg/cm2	Human Dermal	Long Term, local effects
		21.4 mg/m3	5.3 mg/m3	Human Inhalation	Short Term, systemic effects
			1.5 mg/kg	Human Oral	Short Term, systemic effects
			0.3 mg/kg	Human Oral	Long Term, systemic effects

Appropriate engineering controls: Not available

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:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

9: Physical and chemical properties

Physical state Liquid

Color light yellow

Appearance: liquid

Odour: Characteristic

Odour threshold: Not available

pH: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available
Flash point: Not available
Evaporation rate: Not available
Flammability (Solid, Gas): Not available
Upper/lower flammability or explosive limits: Not available
Vapour pressure: Not available
Vapour density: Not available
Relative density: 1.00 g/cm3
Solubility in water: partly soluble
Solubility in oil: partly soluble
Partition coefficient (n-octanol/water): Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: 150.00 mPA-s

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 on main components of the mixture:

3-aminomethyl-3,5,5-trimethylcyclohexylamine	a) acute toxicity	LC50 Inhalation Dust Rat > 5.01 mg/l 4h
		LD50 Oral Rat = 1030 mg/kg
		LD50 Skin Rat > 2000 mg/kg
		LD50 Oral Rat = 1030 mg/kg
		LD50 Skin Rat > 2000 mg/kg
benzyl alcohol	a) acute toxicity	LC50 Inhalation Rat = 11.00000 mg/l 4h
		LD50 Oral Rat = 1230.00000 mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072.00000 mg/m3
2,4,6-tris (dimethylaminomethyl) phenol	a) acute toxicity	LD50 Oral Rat = 2169 mg/kg
		LD50 Skin Rat > 1.00000 ml/kg
2-Methylpentane-1,5-diamine	a) acute toxicity	LC50 Inhalation Mist Rat = 4.9 mg/l 1h
		LD50 Oral Rat = 1170 mg/kg
		LD50 Skin Rat = 1870 mg/kg
		LC50 Inhalation Rat = 4.1 mg/l 1h
		LC50 Inhalation Rat = 2.9 mg/l 1h
		LD50 Oral Rat = 1690 mg/kg
2-piperazin-1-	a) acute toxicity	LD50 Skin Rabbit = 866 mg/kg

ylethylamine		
		LD50 Oral Rabbit > 2097 mg/kg
		LD50 Skin Rabbit = 880 µL/kg
		LD50 Oral Rat = 2140 µL/kg
	e) germ cell mutagenicity	NOAEL Rat > 899 mg/kg
	g) reproductive toxicity	NOAEL Oral Rat = mg/kg
4-tert-butylphenol	a) acute toxicity	LD50 Skin Rabbit = 2318 mg/kg
		LD50 Oral Rat = 4000 mg/kg

12: Ecological information

Toxicity

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
3-aminomethyl-3,5,5-trimethylcyclohexylamine	CAS: 2855-13-2 - EINECS: 220-666-8 - INDEX: 612-067-00-9	a) Aquatic acute toxicity : LC50 Fish = 110 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 23 mg/L 48
		a) Aquatic acute toxicity : EC50 Daphnia = 388 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae > 50 mg/L 72
		b) Aquatic chronic toxicity : NOEC Daphnia = 3 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 14.6 mg/L 48h EPA
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 37 mg/L 72h IUCLID
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1
		a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460.00000 mg/L 96h EPA
2,4,6-tris(dimethylaminomethyl)phenol	CAS: 90-72-2 - EINECS: 202-013-9 - INDEX: 603-069-00-0	a) Aquatic acute toxicity : LC50 Fish = 175.00000 mg/L 96h
		a) Aquatic acute toxicity : EC50 Algae = 46.70000 mg/L 72h
		a) Aquatic acute toxicity : NOEC Algae = 25.10000 mg/L 72h
2-Methylpentane-1,5-diamine	CAS: 15520-10-2 - EINECS: 239-556-6	a) Aquatic acute toxicity : EC50 Algae > 100 mg/L 72
		a) Aquatic acute toxicity : EC50 Fish = 1825 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 19.8 mg/L 48
2-piperazin-1-ylethylamine	CAS: 140-31-8 - EINECS: 205-411-0 - INDEX: 612-105-00-4	a) Aquatic acute toxicity : LC50 Fish = 2190 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 58 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 1950 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata > 1000 mg/L 96h IUCLID

		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss >= 100 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 32 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 495 mg/L 72h IUCLID
4-tert-butylphenol	CAS: 98-54-4 - EINECS: 202-679-0 - INDEX: 604-090-00-8	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 4.71 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 6.9 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 3.9 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 3.4 mg/L 48h EPA
		a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 11.2 mg/L 72h IUCLID

Persistence and degradability

Not available

Bioaccumulative potential

Not available

Mobility in soil

Not available

Other adverse effects

13: Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

14: Transport information

UN number

2735

UN proper shipping name

ADR-Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine)

IATA-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine)

IMDG-Technical name: AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine)

Transport hazard class(es)

ADR-Class: 8

IATA-Class: 8

IMDG-Class: 8

Packing group, if applicable

Road and Rail (ADR-RID) :

ADR-Label: 8

ADR-Packing Group: II

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-Packing group: II

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea (IMDG) :

IMDG-Packing group: II

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35 SGG18

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-B

IMDG-MFAG: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

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

Not available

Special precautions for user

Not available

15: Regulatory information

Safety, health and environmental regulations specific for the product in question

This Safety Data Sheet has been prepared according to P.U. (A) 310 - 2014 and the Industry Code of Practice on Chemicals Classification and Hazard Communication.

16: Other information

Date of first edition: 10/11/2021

Safety Data Sheet dated: 10/11/2021 - version 1

Key literature references and sources:

None

Key/legend to the abbreviations and acronyms:

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.
LTE: Long-term exposure.
STE: Short-term exposure.