

## Safety Data Sheet

### ULTRABOND P 990 1K

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

Date of first edition: 5/3/2017



## 1. Identification

### GHS Product identifier

Mixture identification:

Trade name: ULTRABOND P 990 1K

Trade code: 902444

### Recommended use of the chemical and restrictions on use

Recommended use: Polyurethane-based adhesive

Uses advised against: no data available

### Supplier's details

Company: MAPEI AUSTRALIA Pty Ltd

180 Viking Drive Wacol QLD 4076 Australia

T. +61 7 32765000 (Mon-Fri 8am to 4.30pm)

F. +61 7 32765076

### Emergency phone number

Australian Poisons Information Centre 24 Hour Service 13 11 26

Police or Fire Brigade 000

## 2. Hazard identification



### Classification of the Hazardous chemical

Skin Irrit. 2 Causes skin irritation.

Eye Dam. 1 Causes serious eye damage.

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

Adverse physicochemical, human health and environmental effects:

No other hazards

### GHS label elements, including precautionary statements

#### Pictograms and Signal Words



Danger

#### Hazard statements:

H315 Causes skin irritation.

H318 Causes serious eye damage.

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

#### Precautionary statements:

P261.1 Avoid breathing mist/vapours/spray.

P264.1 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P285 In case of inadequate ventilation wear respiratory protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and 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+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.
P321.A	Specific treatment (see supplementary instructions on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P501.B	Dispose of contents in accordance with local regulation.

**Other hazards which do not result in a classification**

Other Hazards: No other hazards

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### 3. Composition/information on ingredients

**Substances**

no data available

**Mixtures**

**Hazardous components within the meaning of the "Australian Work Health and Safety (WHS)" regulation and related classification:**

Quantity	Name	Ident. Numb.	Classification
10-20 %	calcium oxide	CAS:1305-78-8 EC:215-138-9	Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335
0.49-1 %	diphenylmethane-4,4'-diisocyanate;	CAS:101-68-8 EC:202-966-0 Index:615-005-00-9	Acute Tox. 4; Eye Irrit. 2A; STOT SE 3; Skin Irrit. 2; Resp. Sens. 1; Skin Sens. 1; STOT RE 2; Carc. 2, H332, H319, H335, H315, H334, H317, H373.A, H351

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### 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 ophthalmologist 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.

**Symptoms caused by exposure**

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

**Medical attention and special treatment**

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

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### 5. Fire-fighting measures

**Suitable extinguishing media**

- None in particular.
- Water.
- Carbon dioxide (CO2).

### Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.  
Burning produces heavy smoke.  
Hazardous combustion products: no data available  
Explosive properties: no data available  
Oxidizing properties: no data available

### 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.

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## 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.

### Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand

### Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand  
Wash with plenty of water.

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## 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

Incompatible materials:  
None in particular.  
Instructions as regards storage premises:  
Adequately ventilated premises.

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## 8. Exposure controls/personal protection

### Control parameters – exposure standards, biological monitoring

#### 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
calcium oxide	ACGIH	NNN	2						URT irr
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	ACGIH	NNN			0,005				Resp sens

#### Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
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calcium oxide	1305-78-8	0,49 mg/l	Fresh Water
		0,32 mg/l	Marine water
		3 mg/l	Microorganisms in sewage treatments
		1080 mg/kg	Soil
		816 mg/l	Soil
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	1 mg/l	Fresh Water
		0,1 mg/l	Marine water
		1 mg/kg	Soil
		1 mg/l	Microorganisms in sewage treatments

#### Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark	
calcium oxide	1305-78-8	4 DXE2H_001		4 DXE2H_005	Human Inhalation		Short Term, local effects	
		1 DXE2H_001		1 DXE2H_005	Human Inhalation		Long Term, local effects	
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	101-68-8	50 mg/kg			Human Dermal		Short Term, systemic effects	
		0,1 DXE2H_001			Human Inhalation		Short Term, systemic effects	
		0,1 DXE2H_001			Human Inhalation		Short Term, local effects	
		0,05 DXE2H_001			Human Inhalation		Long Term, systemic effects	
		0,05 DXE2H_001			Human Inhalation		Long Term, local effects	
			25 mg/kg			Human Dermal		Short Term, systemic effects
					0,05 DXE2H_005	Human Inhalation		Short Term, systemic effects
					20 mg/kg	Human Oral		Short Term, systemic effects
			0,05 DXE2H_005	Human Inhalation		Short Term, local effects		

	0,025 DXE2H_ 005	Human Inhalation	Long Term, systemic effects
	0,025 DXE2H_ 005	Human Inhalation	Long Term, local effects
28,7 DXE2H_ 002	17,2 DXE2H_ 006	Human Dermal	Short Term, local effects

### Appropriate engineering controls

no data 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:

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

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

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## 9. Physical and chemical properties

Color: beige or brown

Appearance: paste

Odour: characteristic

Odour threshold: no data available

pH: no data available

Melting point / freezing point: no data available

Initial boiling point and boiling range: no data available

Flash point: 100,0 °C (212,0 °F)

Evaporation rate: no data available

Flammability (Solid, Gas): no data available

Upper/lower flammability or explosive limits: no data available

Vapour pressure: no data available

Vapour density: no data available

Relative density: 1.50 g/cm<sup>3</sup>

Solubility in water: Insoluble

Solubility in oil: partly soluble

Partition coefficient (n-octanol/water): no data available

Auto-ignition temperature: no data available

Decomposition temperature: no data available

Viscosity: 32,000.00 cPs

Specific heat value: no data available

Saturated vapour concentration: no data available

Release of invisible flammable vapours and gases: no data available

Particle size: no data available

Size distribution: no data available

Shape and aspect ratio: no data available

Crystallinity: no data available

Dustiness: no data available

Surface area: no data available

Degree of aggregation or agglomeration, and dispersibility: no data available

Biodurability or biopersistence: no data available

Surface coating or chemistry: no data available

VOC (Volatile Organic Compound) : 0 (Rule 1168) g/l

## 10. Stability and reactivity

### Reactivity

Stable under normal conditions

### Chemical stability

no data available

### Possibility of hazardous reactions

None.

### Conditions to avoid

Stable under normal conditions.

### Incompatible materials

None in particular.

### Hazardous decomposition products

None.

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## SECTION 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:

calcium oxide	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg LD50 Skin Rat > 2500 mg/kg	
diphenylmethane-4,4'-diisocyanate;	f) carcinogenicity	Carcinogenicity Inhalation Rat = 6 mg/m <sup>3</sup>	2 y
	g) reproductive toxicity	NOAEL Inhalation Rat = 12 mg/m <sup>3</sup>	20 d
	d) respiratory or skin sensitisation	Skin Sensitization Skin Mouse Positive Respiratory Sensitization Inhalation Positive	
	l) chronic toxicity	NOAEL Inhalation Rat = 0,2 mg/m <sup>3</sup>	2 y
	b) skin corrosion/irritation	Skin Irritant Skin Rabbit Positive	
	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg LD50 Skin Rabbit > 9400 mg/kg LC50 Inhalation Dust Rat = 0,368 mg/l 4h	

**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

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## 12. Ecological information

### Ecotoxicity

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

Eco-Toxicological Information:

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

Quantity	Component	Ident. Numb.	Ecotox Infos
10-20 %	calcium oxide	CAS: 1305-78-8 - EINECS: 215-138-9	a) Aquatic acute toxicity : LC50 Fish = 457 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia = 49,1 mg/L 48 b) Aquatic chronic toxicity : NOEC Daphnia = 32 mg/L - 14 d a) Aquatic acute toxicity : LC50 Fish = 50,6 mg/L 96 a) Aquatic acute toxicity : LC50 Daphnia = 158 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 184,57 mg/L 72 b) Aquatic chronic toxicity : NOEC Algae = 48 mg/L 72
0.49-1 %	diphenylmethane-4,4'-diisocyanate;	CAS: 101-68-8 - EINECS: 202-966-0 - 67-548- EC: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96  a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24 b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72 c) Bacteria toxicity : EC50 > 100 mg/L 3 d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d e) Plant toxicity : NOEC > 1000 mg/kg - 14 d

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**Other adverse effects**

no data available

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**13. Disposal considerations****Disposal methods**

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.

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**14. Transport information**

Not classified as dangerous in the meaning of transport regulations.

**UN number**

no data available

**UN proper shipping name**

no data available

**Transport hazard class(es)**

no data available

**Packing group, if applicable**

no data available

**Environmental hazards**

no data available

**Special precautions for user**

no data available

**Additional Information**

no data available

**HazChem Code/Emergency Action code**

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## 15. Regulatory information

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

This Safety Data Sheet has been prepared according to the Australian Work Health and Safety (WHS) act and the Code of Practice on preparation of safety data sheets for Hazardous Chemicals.

AICS: all components are listed

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## 16. Other information

### Code Description

- 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.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer .
- H373.A May cause damage to organs through prolonged or repeated exposure if inhaled.

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

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

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:

- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ATE: Acute Toxicity Estimate
- ATEmix: Acute toxicity Estimate (Mixtures)
- BCF: Biological Concentration Factor
- BEI: Biological Exposure Index
- BOD: Biochemical Oxygen Demand
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- CAV: Poison Center
- CE: European Community
- CLP: Classification, Labeling, Packaging.
- CMR: Carcinogenic, Mutagenic and Reprotoxic
- COD: Chemical Oxygen Demand
- COV: Volatile Organic Compound
- CSA: Chemical Safety Assessment
- CSR: Chemical Safety Report
- DMEL: Derived Minimal Effect Level
- DNEL: Derived No Effect Level.
- DPD: Dangerous Preparations Directive
- DSD: Dangerous Substances Directive
- EC50: Half Maximal Effective Concentration
- ECHA: European Chemicals Agency
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- ES: Exposure Scenario
- GefStoffVO: Ordinance on Hazardous Substances, Germany.



GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
IC50: half maximal inhibitory concentration  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
IRCCS: Scientific Institute for Research, Hospitalization and Health Care  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
LDLo: Leathal Dose Low  
N.A.: Not Applicable  
N/A: Not Applicable  
N/D: Not defined/ Not available  
NA: Not available  
NIOSH: National Institute for Occupational Safety and Health  
NOAEL: No Observed Adverse Effect Level  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic  
PGK: Packaging Instruction  
PNEC: Predicted No Effect Concentration.  
PSG: Passengers  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.  
STOT: Specific Target Organ Toxicity.  
TLV: Threshold Limiting Value.  
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).  
vPvB: Very Persistent, Very Bioaccumulative.  
WGK: German Water Hazard Class.

**Paragraphs modified from the previous revision:**

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 12. ECOLOGICAL INFORMATION