# Safety Data Sheet
# ULTRABOND S 997 1K

## Safety Data Sheet dated 23/5/2014, version 2

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Trade name: ULTRABOND S 997 1K
1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Sililated based polyether adhesive
Uses advised against: ==
1.3. Details of the supplier of the safety data sheet
Supplier:
MAPEI S.p.A. -Via Cafiero 22 - Milan -ITALY
Competent person responsible for the safety data sheet:
sicurezza@mapei.it
1.4. Emergency telephone number
MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)
Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

## SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
None.

Adverse physicochemical, human health and environmental effects:
No other hazards

2.2. Label elements
Contents:
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate: May produce an allergic reaction.
Special Provisions:
Safety data sheet available for professional user on request.

Special provisions according to Annex XVII of REACH and subsequent amendments:
None
2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards
Further hazards:
Methanol is released by hydrolysis during application.

## SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and corresponding classification:

>= 2.5% - < 4.99% Trimethoxyvinylsilane

REACH No.: 01-2119513215-52-0003, CAS: 2768-02-7, EC: 220-449-8
Xn; R10-20
2.6/3 Flam. Liq. 3 H226
3.1/4/Inhal Acute Tox. 4 H332

## SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wash immediately with water for at least 10 minutes.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.
A suspension of activated charcoal in water, or petrolium jelly may be administered.

In case of Inhalation:

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

4.2. Most important symptoms and effects, both acute and delayed

No specific hazards are encountered under normal product use.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:
(see paragraph 4.1)

## SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
None in particular.
Water.
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

5.3. Advice for firefighters

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.

## SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Limit leakages with earth or sand.
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

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

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

## SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

## SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

DNEL Exposure Limit Values

Trimethoxyvinylsilane

- CAS: 2768-02-7

Worker Industry: 4.9 mg/m3 - Exposure: Human Inhalation

Worker Industry: 0.69 mg/kg - Exposure: Human Dermal

Consumer: 1.04 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.3 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Consumer: 0.3 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Trimethoxyvinylsilane

- CAS: 2768-02-7

Target: Fresh Water - Value: 0.34 mg/l

Target: Marine water - Value: 0.034 mg/l

Target: Freshwater sediments - Value: 0.27 mg/kg

Target: Soil (agricultural) - Value: 0.046 mg/kg

Target: Microorganisms in sewage treatments - Value: 110 mg/l

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

The use of LLPDE (0,06 mm), nitrile (0,4) or butyl (0,5 mm) gloves is suggested.

Latex gloves are not recommended.

Respiratory protection:
Not needed for normal use.
Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:
None

Environmental exposure controls:
None

## SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance: | paste |
| Colour: | various |
| Odour: | typical |
| Odour threshold: | N.A. |
| pH: | == |
| Melting point / freezing point: | == ℃ |
| Initial boiling point and boiling range: | == ℃ |
| Solid/gas flammability: | N.A. |
| Upper/lower flammability or explosive limits: | N.A. |
| Vapour density: | N.A. |
| Flash point: | > 100 ℃ |
| Evaporation rate: | N.A. |
| Vapour pressure: | N.A. |
| Relative density: | 1,40-1,50 g/cm³ (23℃) |
| Vapour density (air=1): | N.A. |
| Solubility in water: | insoluble |
| Solubility in oil: | partly soluble |
| Viscosity: | 950000-1250000 mPa.s (23℃) |
| Auto-ignition temperature: | N.A. |
| Explosion limits(by volume): | N.A. |
| Decomposition temperature: | N.A. |
| Partition coefficient (n-octanol/water): | N.A. |
| Explosive properties: | N.A. |
| Oxidizing properties: | N.A. |

9.2. Other information

| | |
|---|---|
| Miscibility: | N.A. |
| Fat Solubility: | N.A. |
| Conductivity: | N.A. |
| Substance Groups relevant properties | N.A. |

## SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions

10.2. Chemical stability
Stable under normal conditions

10.3. Possibility of hazardous reactions
None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

## SECTION 11: Toxicological information

11.1. Information on toxicological effects

Route(s) of entry:

| | |
|---|---|
| Ingestion: | Yes |
| Inhalation: | Yes |
| Contact: | No |

Toxicological information related to the product:

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:

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Trimethoxyvinylsilane

- CAS: 2768-02-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 7100 mg/kg - Source: OECD 401
Test: LD50 - Route: Skin - Species: Rabbit = 3200 mg/kg - Source: OECD 402
Test: LC50 - Route: Inhalation - Species: Rat = 16.8 mg/kg - Duration: 4h - Source: OECD 403

bis(2-propylheptyl) phthalate

- CAS: 53306-54-0

LD50 rat (oral): > 5000 mg/kg
LC50 rat (inhalation): > 20,5 mg/kg
LD50 rabbit (dermal): > 2000 mg/kg

Nevertheless methanol released during the use of the product can cause irritation of the mucous membrane, headache and serious effetcts on the central nervous system.
It's therefore necessary to limit the exposure to methanol at high concentrations in the job site, for example using it only in well-ventilated areas.

Corrosive/Irritating Properties:

Eye:

The product can cause a temporary irritation by contact.

Sensitizing Properties:

No effects are known.

Cancerogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

If not differently specified, the information required in Regulation 453/2010/EC 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

## SECTION 12: Ecological information

12.1. Toxicity

Not available data on the mixture
Aquatic toxicity: the preparation is not to be considered toxic to the aquatic environment based on components.
LC50>100mg/l - aquatic species (calculated data following 1999/45/EC Directive).
Adopt good industrial practices, so that the product is not released into the environment.
Trimethoxyvinylsilane
- CAS: 2768-02-7
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 191 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 169 mg/l - Duration h: 48
Endpoint: LC50 - Species: Algae = 210 mg/l - Duration h: 72

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None
Not available data on the mixture

## SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.
91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.
Disposal of hardened product (EC waste code) : 08 04 10
Disposal of not hardened product (EC waste code) : 08 04 09
The suggested European waste code is just based on the composition of the product.
According to the specific process or application field a different waste code may be necessary.

## SECTION 14: Transport information

14.1. UN number

UN Number: =

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): no dangerous good
ADR-Upper number: NA
Air (ICAO/IATA): no dangerous good
Sea (IMO/IMDG): no dangerous good

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

ADR Enverinmental Pollutant:

Marine pollutant: No

N.A.

14.6. Special precautions for user

N.A.

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

No

## SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Dir. 2006/8/EC
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex I)
Regulation (EU) n. 286/2011 (ATP 2 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

None

REACH Regulation (1907/2006)

REACH Regulation (1907/2006) – All. XVII: N.A.
REACH Regulatio n°1907/2006 (REACH) – Art. 59 (Su bstances in “Candidate List”): N.A.
CLP Regulation n°1272/2008 (CLP) and s.m.i.
Directive n°1999/45/CE (Dangerous Preparation) an d s.m.i.
Directive n°67/548/CEE (Substances) and s.m.i.
Legislative Decree no. 81 of the 9th of April 2008 Title XI "Dangerous substances - Chapter I - Protection against chemical agents"
Directive 2000/39/CE and s.m.i. (Professional threshold limit)
Legislative Decree no. 152 of the 3rd of April 2006 and subsequent modifications and additions. (Environmental regulations)
Directive 105/2003/CE (Seveso III): N.A.
ADR Agreement – IMDG Code – IATA Regulation
VOC (2004/42/EC) : N.A. g/l

15.2. Chemical safety assessment

No

## SECTION 16: Other information

Text of phrases referred to under heading 3:

R10 Flammable.
R20 Harmful by inhalation.

H226 Flammable liquid and vapour.
H332 Harmful if inhaled.

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 8: Exposure controls/personal protection
SECTION 11: Toxicological information
SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.
Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX'S - Dangerous properties of industrial materials
Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

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.
This MSDS cancels and replaces any preceding release.

| | |
|---|---|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road. |
| CAS: | Chemical Abstracts Service (division of the American Chemical Society). |
| CLP: | Classification, Labeling, Packaging. |
| DNEL: | Derived No Effect Level. |
| EINECS: | European Inventory of Existing Commercial Chemical Substances. |
| GefStoffVO: | Ordinance on Hazardous Substances, Germany. |
| GHS: | Globally Harmonized System of Classification and Labeling of Chemicals. |
| 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). |
| IMDG: | International Maritime Code for Dangerous Goods. |
| INCI: | International Nomenclature of Cosmetic Ingredients. |
| KSt: | Explosion coefficient. |
| LC50: | Lethal concentration, for 50 percent of test population. |
| LD50: | Lethal dose, for 50 percent of test population. |
| LTE: | Long-term exposure. |
| PNEC: | Predicted No Effect Concentration. |
| RID: | Regulation Concerning the International Transport of Dangerous Goods by Rail. |
| STE: | Short-term exposure. |
| STEL: | Short Term Exposure limit. |

| | |
|---|---|
| STOT: | Specific Target Organ Toxicity. |
| TLV: | Threshold Limiting Value. |
| TWA | Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard). |
| OEL: | European threshold limit value |
| VLE: | Threshold Limiting Value. |
| WGK: | German Water Hazard Class. |
| TSCA: | United States Toxic Substances Control Act Inventory |
| DSL: | DSL - Canadian Domestic Substances List |