Safety Data Sheet
ULTRABOND ECO 380

Safety Data Sheet dated 26/5/2017, version 2

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

1.1. Product identifier
Trade name: ULTRABOND ECO 380

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Water-borne synthetic polymer based adhesive
Uses advised against:
==

1.3. Details of the supplier of the safety data sheet
Supplier:
MAPEI U.K. Ltd - Mapei House Steel Park Road
Halesowen - West Midlands B62 8HD
Competent person responsible for the safety data sheet:
sicurezza@mapei.it

1.4. Emergency telephone number
MAPEI U.K. Ltd - phone: +44(0)121 508 6970
fax: +44(0)121 5086 960
www.mapei.co.uk (office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

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

2.2. Label elements

Hazard pictograms:
None
Hazard Statements:
None
Precautionary Statements:
None
Special Provisions:
EUH210 Safety data sheet available on request.
Contains
1,2-benzisothiazol-3(2H)-one: May produce an allergic reaction.
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Special provisions according to Annex XVII of REACH and subsequent amendments: Restricted to professional users.

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:
No other hazards
See at paragraph 11 the additional information concerning crystalline silica
The product is not classified dangerous according to CLP (EC 1272/2008); in fact it is a water based preparation in which there are no dangerous components.
The below mentioned crystalline silica, that originally is in the shape of inhalable powder with specific exposure limits, after its mixture into the preparation doesn't involve any exposure risk.

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures

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

>= 5% - < 10% free crystalline silica (Ø >10 µ)
CAS: 14808-60-7, EC: 238-878-4
The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

>= 1% - < 2.5% 1-Phenoxypropan-2-ol
REACH No.: 01-2119486566-23-XXXX, CAS: 770-35-4, EC: 212-222-7
melding 3.3/2 Eye Irrit. 2 H319

>= 1% - < 2.5% free crystalline silica (Ø <10 µ)(*)
CAS: 14808-60-7, EC: 238-878-4
melding 3.9/1 STOT RE 1 H372

>= 0.25% - < 0.49% Ethoxysulphate nonylphenol, ammonium salt
CAS: 68649-55-8
4.1/C4 Aquatic Chronic 4 H413

>= 0.1% - < 0.25% Alkylphenol polyethyleneglycolether
CAS: 9016-45-9
4.1/C3 Aquatic Chronic 3 H412

>= 0.1% - < 0.25% 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated
CAS: 9002-93-1
4.1/C3 Aquatic Chronic 3 H412

>= 0.005% - < 0.01% 1,2-benzoisothiazol-3(2H)-one
Index number: 613-088-00-6, CAS: 2634-33-5, EC: 220-120-9
melding 3.1/2/Inhal Acute Tox. 2 H330
melding 3.2/2 Skin Irrit. 2 H315
melding 3.3/1 Eye Dam. 1 H318
melding 4.1/C2 Aquatic Chronic 2 H411
melding 3.4.2/1 Skin Sens. 1 H317
melding 4.1/A1 Aquatic Acute 1 H400
melding 3.1/4/Oral Acute Tox. 4 H302
SVHC Substances:
0.135% 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated
CAS: 9002-93-1
Substance SVHC

### 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 petroleum jelly may be administered.
Wash the mouth thoroughly and drink plenty of water. In case of disease consult a physician immediately and present this safety-data sheet.

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:
Water.
CO2 or Dry chemical fire extinguisher.
Extinguishing media which must not be used for safety reasons:
None in particular.

**5.2. Special hazards arising from the substance or mixture**

The product does not present a fire hazard
Do not inhale explosion and combustion gases.
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.
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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

6.3. Methods and material for containment and cleaning up

After the product has been recovered, rinse the area and materials involved with water.

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

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Store above 5°C.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

free crystalline silica (Ø >10 µ) - CAS: 14808-60-7

ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer

free crystalline silica (Ø <10 µ)(* - CAS: 14808-60-7

EU - TWA(8h): 0.025 mg/m³ - Notes: A2 (R) - Pulm fibrosis, lung cancer

ACGIH - TWA(8h): 0.025 mg/m³ - Notes: (R), A2 - Pulm fibrosis, lung cancer

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

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.

Not needed for normal use.

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

Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
Appearance: paste
Colour: beige
Odour: typical
Odour threshold: N.A.
pH: 9
Melting point / freezing point: N.A.
Initial boiling point and boiling range: 100 °C
Solid/gas flammability: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Flash point: == °C
Evaporation rate: N.A.
Vapour pressure: N.A.
Relative density: 1.20-1,25 g/cm³ (23°C)
Vapour density (air=1): N.A.
Solubility in water: dispersible
Solubility in oil: insoluble
Viscosity: 70000-100000 mPa.s (23°C)
Auto-ignition temperature: == °C
Explosion limits(by volume): ==
Decomposition temperature: N.A.
Partition coefficient (n-octanol/water): N.A.
Explosive properties: ==
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: No
Contact: No

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 product:
N.A.

Toxicological information of the main substances found in the product:
free crystalline silica (Ø >10 µ) - CAS: 14808-60-7
a) acute toxicity:
   Test: LD50 - Route: Oral > 2000 mg/kg
   Test: LD50 - Route: Skin > 2000 mg/kg
1-Phenoxypropan-2-ol - CAS: 770-35-4
   LD50 (oral rat) > 2000 mg/kg
   LC50 (inhalation rat) > 5.4 mg/l/4h

Corrosive/Irritating Properties:
Eye: The product can cause a temporary irritation by contact.

Cancerogenic Effects:
The IARC (International Agency for Research on Cancer) believes that the crystalline silica inhaled at the workplace can cause lung cancer in man.
However, it also points out that the cancer effect depends on the silica characteristics and on the biological-physical condition of the environment.
There is a large amount of information in support of the fact that increased risk of cancer is limited to persons suffering from silicosis.

In the current situation of studies, protection of workers from silicosis can be ensured by respecting the exposure limit values.

Mutagenic Effects:
No effects are known.

Teratogenic Effects:
No effects are known.

If not differently specified, the information required in Regulation (EU)2015/830 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
Adopt good industrial practices, so that the product is not released into the environment.
Not available data on the mixture
Biodegradability: no data available on the preparation.
1,2-benzisothiazol-3(2H)-one - CAS: 2634-33-5
   a) Aquatic acute toxicity:
       Endpoint: EC50 - Species: Daphnia = 3.27 mg/l - Duration h: 48
       Endpoint: EC50 - Species: Algae = 0.11 mg/l - Duration h: 72
       Endpoint: LC50 - Species: Fish = 1.6 mg/l - Duration h: 96
   b) Aquatic chronic toxicity:
       Endpoint: NOEC - Species: Fish = 0.21 mg/l
       Endpoint: NOEC - Species: Daphnia = 1.2 mg/l - Notes: 21 g

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.
Disposal of hardened product (EC waste code) : 08 04 10
Disposal of not hardened product (EC waste code) : 08 04 16
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
Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name
N.A.

14.3. Transport hazard class(es)
ADR-Upper number: NA
N.A.

14.4. Packing group
N.A.

14.5. Environmental hazards
Marine pollutant: No
N.A.

14.6. Special precautions for user
N.A.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
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<table>
<thead>
<tr>
<th>Regulation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dir. 98/24/EC</td>
<td>Risks related to chemical agents at work</td>
</tr>
<tr>
<td>Dir. 2000/39/EC</td>
<td>Occupational exposure limit values</td>
</tr>
<tr>
<td>Regulation (EC) n. 1907/2006 (REACH)</td>
<td></td>
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<tr>
<td>Regulation (EC) n. 1272/2008 (CLP)</td>
<td></td>
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<tr>
<td>Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013</td>
<td></td>
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<tr>
<td>Regulation (EU) 2015/830</td>
<td></td>
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<tr>
<td>Regulation (EU) n. 286/2011 (ATP 2 CLP)</td>
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<tr>
<td>Regulation (EU) n. 618/2012 (ATP 3 CLP)</td>
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<td>Regulation (EU) n. 487/2013 (ATP 4 CLP)</td>
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<tr>
<td>Regulation (EU) n. 944/2013 (ATP 5 CLP)</td>
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</table>

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
- Restrictions related to the product: No restriction.
- Restrictions related to the substances contained:
  - Restriction 28
  - Restriction 46

REACH Regulation (1907/2006) – All. XVII: N.A.
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)
ADR Agreement – IMDG Code – IATA Regulation
VOC (2004/42/EC) : N.A. g/l

Social Dialogue on Respirable Crystalline Silica

On April 26, 2006 was signed a multi-sector social dialogue, based on a "Guide to Good Practices", on workers health protection who are in contact with products containing crystalline silica.
The text of the agreement published in G.U. European Union (2006 / C 279/02) and the "Guide to Good Practices", with attachments, are available on www.nepsi.eu website, they offer guidelines and useful information for handling products containing respirable crystalline silica.

SVHC Substances:
Substances in candidate list (Art. 59 Reg. 1907/2006, REACH):
- Ethoxysulphate nonylphenol, ammonium salt
  - SVHC
- Alkylphenol polyethyleneglycolether
  - SVHC
- 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated
  - Equivalent level of concern having probable serious effects to environment, Endocrine disruptor

Provisions related to directive EU 2012/18 (Seveso III):
- N.A.

15.2. Chemical safety assessment
- No

SECTION 16: Other information
Text of phrases referred to under heading 3:
- H319 Causes serious eye irritation.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H413 May cause long lasting harmful effects to aquatic life.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled.</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
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</tbody>
</table>

**Paragraphs modified from the previous revision:**

- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other 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

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 MSDS cancels and replaces any preceding release.

**Definitions:**
- 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).
- KSt: Explosion coefficient.
- LC50: Lethal concentration, for 50 percent of test population.
- LD50: Lethal dose, for 50 percent of test population.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Term</th>
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<tbody>
<tr>
<td>LTE</td>
<td>Long-term exposure.</td>
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<tr>
<td>PNEC</td>
<td>Predicted No Effect Concentration.</td>
</tr>
<tr>
<td>RID</td>
<td>Regulation Concerning the International Transport of Dangerous Goods by Rail.</td>
</tr>
<tr>
<td>STE</td>
<td>Short-term exposure.</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure limit.</td>
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<tr>
<td>STOT</td>
<td>Specific Target Organ Toxicity.</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limiting Value.</td>
</tr>
<tr>
<td>TWATLV</td>
<td>Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).</td>
</tr>
<tr>
<td>OEL</td>
<td>Substance with a Union workplace exposure limit.</td>
</tr>
<tr>
<td>VLE</td>
<td>Threshold Limiting Value.</td>
</tr>
<tr>
<td>WGK</td>
<td>German Water Hazard Class.</td>
</tr>
<tr>
<td>TSCA</td>
<td>United States Toxic Substances Control Act Inventory</td>
</tr>
<tr>
<td>DSL</td>
<td>DSL - Canadian Domestic Substances List</td>
</tr>
<tr>
<td>N.A.</td>
<td>Not available</td>
</tr>
</tbody>
</table>