Safety Data Sheet
ULTRABOND P 902 2 K comp. A

Safety Data Sheet dated 28/11/2012, version 1

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

1.1. Product identifier
Trade name: ULTRABOND P 902 2 K comp. A
1.2. Relevant identified uses of the substance or mixture and uses advised against
Epoxy-polyurethane 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
Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:
Properties / Symbols:
Xi Irritant
R Phrases:
R10 Flammable.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

2.2. Label elements

Xi
Symbols:
Xi Irritant
R Phrases:
R10 Flammable.
R36/38 Irritating to eyes and skin.
R43 May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrases:
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.
S37 Wear suitable gloves.
S43 In case of fire, use CO2, chemical powders or foam.
S56 Dispose of this material and its container to hazardous or special waste collection point.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.
S7 Keep container tightly closed.

Contents:
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Special Provisions:
Contains epoxy constituents. See information supplied by the manufacturer.

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

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:

5% - 10% reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)
REACH No.: 01-2119456619-26-xxxx, Index number: 603-074-00-8, CAS: 25068-38-6, EC: 500-033-5
Xi,N; R36/38-43-51/53
3.3/2 Eye Irrit. 2 H319
3.2/2 Skin Irrit. 2 H315
3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317
4.1/C2 Aquatic Chronic 2 H411

1% - 2.5% oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
REACH No.: 01-21194852289-22-xxxx, Index number: 603-103-00-4, CAS: 68609-97-2, EC: 271-846-8
Xi; R38-43
3.2/2 Skin Irrit. 2 H315
3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317

0.1% - 0.25% nonylphenol
Index number: 601-053-00-8, CAS: 25154-52-3, EC: 246-672-0
Repr. Cat. 3,Xn,C,N; R22-34-50/53-62-63
3.7/2 Repr. 2 H361
3.2/1B Skin Corr. 1B H314
4.1/A1 Aquatic Acute 1 H400
4.1/C1 Aquatic Chronic 1 H410
3.1/4/Oral Acute Tox. 4 H302

590 mg/kg butanone; ethyl methyl ketone

REACH No.: 01-2119457290-430000, Index number: 606-002-00-3, CAS: 78-93-3, EC: 201-159-0
F,Xi; R11-36-66-67
2.6/2 Flam. Liq. 2 H225
3.3/2 Eye Irrit. 2 H319
3.8/3 STOT SE 3 H336

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediatley and dispose off 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:

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

The product is a liquid that can catch fire at temperatures in excess of 21 C if exposed to an ignition source.
If brought into contact with the eyes, the product causes irritation that may last for over 24 hours, and if brought into contact with the skin it causes significant inflammation with erythema, scabs, and oedema.
If brought into contact with the skin, the product may cause sensitisation of the skin.
This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

4.3. 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).
Treatment:
(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
None in particular.
In case of fire, use CO2, chemical powders or foam.
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 all sources of ignition.
Remove persons to safety.
See protective measures under point 7 and 8.

6.2. Environmental precautions

Limit leakages with earth or sand.
Eliminate all unguarded flames and possible sources of ignition. Do not smoke.
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

Rapidly recover the product, wearing protective clothing.
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, inhaltion 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.
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.
Do not smoke while working.
See also section 8 for recomened protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butanone; ethyl methyl ketone - CAS: 78-93-3

ACGIH - LTE mg/m3: 589.78 mg/m3, 200 ppm - STE mg/m3: 884.66 mg/m3, 300 ppm
NDS - LTE mg/m3: 450 mg/m3

NDSCh - LTE mg/m3: 900 mg/m3
SUVA - LTE mg/m3: 590 mg/m3, 200 ppm - STE mg/m3: 590 mg/m3, 300 ppm
EU - LTE mg/m3: 600 mg/m3, 200 ppm - STE mg/m3: 900 mg/m3, 300 ppm

DNEL Exposure Limit Values

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Worker Industry: 8.3 mg/kg - Exposure: Human Dermal Short Term, systemic effects
Worker Industry: 12.3 mg/m3 - Exposure: Human Inhalation Short Term, systemic effects
Worker Industry: 8.3 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Worker Industry: 12.3 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 3.6 mg/kg - Exposure: Human Dermal Short Term, systemic effects
Consumer: 0.75 mg/m3 - Exposure: Human Inhalation Short Term, systemic effects
Consumer: 0.75 mg/kg - Exposure: Human Oral Short Term, systemic effects
Consumer: 3.6 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Consumer: 0.75 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 0.75 mg/m3 - Exposure: Human Oral Long Term, systemic effects

butanone; ethyl methyl ketone - CAS: 78-93-3

Worker Industry: 1161 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Worker Industry: 600 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects
Consumer: 412 mg/kg - Exposure: Human Dermal Long Term, systemic effects
Consumer: 106 mg/m3 - Exposure: Human Inhalation Long Term, systemic effects

PNEC Exposure Limit Values

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6

Target: Fresh Water - Value: 0.003 mg/l
Target: Marine water - Value: 0.0003 mg/l
Target: Freshwater sediments - Value: 0.5 mg/kg
Target: Marine water sediments - Value: 0.5 mg/kg

butanone; ethyl methyl ketone - CAS: 78-93-3

Target: Freshwater sediments - Value: 284.74 mg/kg
Target: Marine water sediments - Value: 284.7 mg/kg
Target: Fresh Water - Value: 55.8 mg/l

8.2. Exposure controls

Eye protection:

Safety goggles.
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.
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:	brown o beige
Odour:	typical
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	N.A.
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.
Flash point:	27 °C
Evaporation rate:	N.A.
Vapour pressure:	N.A.
Relative density:	1.55 g/cm³ (23°C)
Vapour density (air=1):	N.A.
Solubility in water:	insoluble
Solubility in oil:	soluble
Viscosity:	40000-50000 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

It may catch fire on contact with powerful oxidising agents.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

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:
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 15000 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit = 23000 mg/kg
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. - CAS: 68609-97-2
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat 19200 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit > 4500 mg/kg
butanone; ethyl methyl ketone - CAS: 78-93-3
a) acute toxicity:
Test: LC50 - Route: Inhalation - Species: Mouse 40 mg/l
Test: LD50 - Route: Oral - Species: Rat 2737 mg/kg
Test: LD50 - Route: Skin - Species: Rabbit 13 g/kg
Test: LC50 - Route: Inhalation - Species: Rat 23.5 mg/l - Duration: 8h
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

Corrosive/Irritating Properties:
Skin:
The product can cause irritation by contact.
Eye:
The product can cause irritation by contact
Sensitizing Properties:
Frequent contact may cause sensitization.
Cancerogenic Effects:
No effects are known.
Mutagenic Effects:
No effects are known.
Teratogenic Effects:
No effects are known.
Additional Information:
Liquid epoxy resin contained in this material causes only minor skin irritation. However, all epoxy resins are capable of causing sensitizing of the skin.
Susceptibility to skin irritation and sensitization varies from person to person.
In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact.
Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

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
Adopt good industrial practices, so that the product is not released into the environment.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) - CAS: 25068-38-6
a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 2 mg/l - Duration h: 96
Endpoint: EC50 - Species: Daphnia = 1.8 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 11 mg/l - Duration h: 72
butanone; ethyl methyl ketone - CAS: 78-93-3
a) Aquatic acute toxicity:
Endpoint: EC50 - Species: Daphnia = 308 mg/l - Duration h: 48
Endpoint: EC50 - Species: Algae = 2029 mg/l - Duration h: 96
Endpoint: LC50 - Species: Fish = 2993 mg/l - Duration h: 48

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.
Dispose of this material and its container to hazardous or special waste collection point.
Avoid release to the environment. Refer to special instructions/Safety data sheets.
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: 1133

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): ==
Transport in accordance with the paragraphs 2.2.3.1.5 ADR or 2.3.2.5 IMDG
ADR-Upper number: NA
Air (ICAO/IATA): 3, III
Sea (IMO/IMDG): 3, III
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)
Regulation (EU) n. 453/2010 (Annex I)

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 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.

Directive 2000/39/CE and s.m.i. (Professional threshold limit)

Directive 105/2003/CE (Seveso III): N.A.
ADR Agreement – IMDG Code – IATA Regulation
Wassergefährdungsklasse:

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:

R11 Highly flammable.
R22 Harmful if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R62 Possible risk of impaired fertility.
R63 Possible risk of harm to the unborn child
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
H361 Suspected of damaging fertility or the unborn child.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H302 Harmful if swallowed.
H225 Highly flammable liquid and vapour.
H336 May cause drowsiness or dizziness.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

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.
N.A.:	N.A.
N.D.:	