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

1.1 Product identifier

Trade name: ZZ® 333

This safety data sheet pertains to the following products:

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Fire protection means. Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company name: ZAPP-ZIMMERMANN GmbH
Street/POB-No.: Marconistr. 7-9
Postcode, city: 50769 Köln
Germany
WWW: www.z-z.de
Email: info@z-z.de
Telephone: +49 (0)221-97 061-0
Telefax: +49 (0)221-97 061-928

Department responsible for information:
Lars Volkmer,
Telephone: +49 (0)221-97061-160, e-mail Lars.Volkmer@kzim.de

1.4 Emergency telephone number

GIZ-Nord, Göttingen
Telephone: +49 551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

Special labelling

EUH208 Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

2.3 Other hazards

No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:
No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: A mixture of acrylate with additives (halogen-free), not cured

Hazardous ingredients:

Identifiers	Designation Classification	Content
REACH 01-2120761540-60-xxxx EC No. 220-120-9 CAS 2634-33-5	1,2-Benzisothiazol-3(2H)-one Acute Tox. 4; H302. Acute Tox. 2; H330. Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1A; H317. Aquatic Acute 1; H400. Aquatic Chronic 1; H410. Acute toxicity estimate (ATE): Oral: 450 mg/kg bw. Inhalative, dust/mist: 0,21 mg/L. Specific concentration limits (SCL): Skin Sens. 1A; H317: C ≥ 0.036 % M-factors: Aquatic Acute 1: M = 1. Aquatic Chronic 1: M = 1.	< 0.036 %

Full text of H- and EUH-statements: see section 16.

Additional information: Contains Aluminium hydroxide. The maximum workplace exposure limits are, where necessary, listed in section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand.

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. In the event of discomfort seek medical treatment.

Following skin contact: Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with soap and plenty of water. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth. Do not induce vomiting. Immediately get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause allergic reactions in already sensitized persons.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire.
In case of fire may be liberated: Ammonia, phosphorus oxides, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective clothing to protect skin and eyes.

Additional information: Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing. Keep unprotected people away.
Provide adequate ventilation. Take off contaminated clothing and wash it before reuse.
Avoid contact with the substance. Do not breathe vapours.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Final cleaning.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.
Avoid contact with skin and eyes. Do not breathe vapours.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep containers tightly closed and at a temperature between 10 °C and 35 °C.
Keep in a cool, well-ventilated place. Keep container dry. Protect from humidity and water.
Shelf life: 12 months (at 23 °C).

Hints on joint storage: Keep away from food and drinks.

7.3 Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Additional information: Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection: When vapours form: Use combination filter type A2-P2 according to EN 14387.

Hand protection: Protective gloves according to EN ISO 374-1.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN ISO 16321-1.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Do not breathe vapours. Avoid contact with the substance.
When using do not eat, drink or smoke.
Take off contaminated clothing and wash it before reuse.
Wash hands before breaks and after work.
Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid Form: pasty
Colour:	red brown
Odour:	No data available
Melting point/freezing point:	No data available
Boiling point:	No data available
Flammability:	No data available
Lower and upper explosion limit:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	No data available
Kinematic viscosity:	No data available
Solubility:	No data available

Partition coefficient n-octanol/water (log value):
No data available

Vapour pressure: No data available

Density: 1.3 - 1.45 g/mL

Relative vapour density: No data available

Particle characteristics: Not applicable

9.2 Other information

Explosive properties: No data available

Oxidizing characteristics: none

Auto-ignition temperature: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.
Shelf life: 12 months (at 23 °C).
Directions for use: The product is completely cured after 24 h.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Protect from humidity and water.
Keep away from heat.

10.5 Incompatible materials

None known

10.6 Hazardous decomposition products

No decomposition when used properly.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Based on available data, the classification criteria are not met. Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties:

No data available

Other information: No data available

SECTION 12: Ecological information

12.1 Toxicity

Further details: No data available

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 08 04 10 = waste adhesives and sealants other than those mentioned in 08 04 09.

Recommendation: Dispose of waste according to applicable legislation.

Package

Waste key number: 15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

Section 14. Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Dangerous for the environment:

Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - EC member states

Labelling of packaging with <= 125mL content

Hazard statements: EUH208 Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210 Safety data sheet available on request.

Precautionary statements: not applicable

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 75

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H302 = Harmful if swallowed.
H315 = Causes skin irritation.
H317 = May cause an allergic skin reaction.
H318 = Causes serious eye damage.
H330 = Fatal if inhaled.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
EUH208 = Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.
EUH210 = Safety data sheet available on request.

Reason of change: Changes in section 15: Regulatory information
Date of first version: 24/3/2014

Department issuing data sheet:

see section 1: Department responsible for information

Abbreviations and acronyms:

Acute Tox.: Acute toxicity
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
Aquatic Acute: Hazardous to the aquatic environment - acute
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Bw: Body weight
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities
EU: European Union
Eye Dam.: Eye damage
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
M-factor: Multiplication factor
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
Skin Irrit.: Skin irritation
Skin Sens.: Skin sensitisation
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative

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