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

1.1 Product identifier

Trade name: ZZ® 391

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: Sealant tape (Fire protection agent)

1.3 Details of the supplier of the safety data sheet

Company name: Karl Zimmermann GmbH
Street/POB-No.: Marconistr. 7-9
Postal Code, city: 50769 Köln
Germany
WWW: www.kzim.de
E-mail: info@kzim.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

Article not subject to hazard labelling or classification.

2.2 Label elements

Labelling (CLP)

not applicable

Special labelling

EUH210 Safety data sheet available on request.

2.3 Other hazards

Processing, e.g. by cutting, sawing or grinding, can produce particles and dust. Inhalation of dust may cause irritation of the respiratory system. Dust contact with the eyes can lead to mechanical irritation.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

The product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Sealing agent on the basis of butyl caoutchouc (butyl rubber), Polyisobutylene, fillers and additives
The product does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 203-615-4 CAS 108-78-1	Melamine (SVHC) Carc. 2; H351. Repr. 2; H361f. STOT RE 2; H373.	>= 1 %

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

Additional information: Contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Melamine (Equivalent level of concern having probable serious effects to human health (Article 57(f) - human health); Equivalent level of concern having probable serious effects to the environment (Article 57(f) - environment))

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of inhalation: Not a probable route of exposure.
In case of development of vapours or dust: Provide fresh air.
In the event of discomfort seek medical treatment.

Following skin contact: Remove residues with soap and water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

After eye contact: With eyelids open, wash out eyes for several minutes under flowing water. Remove contact lenses, if present and easy to do. Continue rinsing.
In case of troubles or persistent symptoms, consult an opthalmologist.

After swallowing: Swallowing is not regarded as a possible way of exposition.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of dust may cause irritation of the respiratory system. Dust contact with the eyes can lead to mechanical irritation.

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, dry 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

On heating or in case of fire toxic gases may form.
If heated to decomposition product may emit: Smoke, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Use fine water spray to cool endangered containers.
Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation.
In the case of the formation of dust: Wear appropriate protective equipment. Do not breathe dust. Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. To clean the floor and all object contaminated by this material, use white spirit.

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: Wash hands before breaks and after work. When using do not eat, drink or smoke.
For mechanical processing: Avoid generation of dust. Provide adequate ventilation.
In the case of the formation of dust: Wear appropriate protective equipment. Do not breathe dust. Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a dry and well-ventilated place.
storage temperature: 5 °C up to 25 °C

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

8.2 Exposure controls

Local exhaust when handling heated material.
Provide adequate ventilation.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Usually no personal respirative protection necessary.
For mechanical processing: Particulates filter P1 according to EN 143.

Hand protection: Protective gloves according to EN ISO 374:1.
Glove material: nitrile rubber, butyl caoutchouc (butyl rubber), polyvinyl alcohol
Layer thickness: 1 mm
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN ISO 16321-1:2022.

Body protection: Wear work clothes with long arms.

General protection and hygiene measures:
Wash hands before breaks and after work. When using do not eat, drink or smoke. Avoid generation of dust. Do not breathe dust. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place.

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	solid Form: Sealant tape
Colour:	red brown
Odour:	mild, weak
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	LEL (Lower Explosion Limit): not applicable UEL (Upper Explosive Limit): not applicable
Flash point/flash point range:	> 180 °C
Decomposition temperature:	> 200 °C
pH:	neutral
Viscosity, kinematic:	No data available
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available

Vapour pressure:	No data available
Density:	approx. 1.4 g/cm³
Vapour density:	No data available
Particle characteristics:	No data available

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Solvent content:	0 %
Evaporation rate:	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.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Protect from excessive heat.

10.5 Incompatible materials

Acids, organic solvents

10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: > 200 °C

SECTION 11: Toxicological information

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

Toxicological effects:

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: Lack of data.
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: Product is not biodegradable.
Due to its high density, product does not float and, therefore, cannot be separated by normal light-density material separators.

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

The product does not contain any substances classified as PBT or vPvB.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 02 99 = wastes from the MFSU of plastics, synthetic rubber and man-made fibres: wastes not otherwise specified
MFSU = manufacture, formulation, supply and use

Recommendation: Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation.

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

Volatile organic compounds (VOC):

0 % by weight

Further regulations, limitations and legal requirements:

Contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Melamine.

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:

H351 = Suspected of causing cancer.
H361f = Suspected of damaging fertility.
H373 = May cause damage to organs through prolonged or repeated exposure.
EUH210 = Safety data sheet available on request.

Reason of change:

Changes in section 3: Hazards identification
Changes in section 8: Occupational exposure limit values
General revision (Article)
General revision

Date of first version: 15/11/2021

Department issuing data sheet:

see section 1: Department responsible for information

Abbreviations and acronyms:

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
AS/NZS: Australian Standards/New Zealand Standards
Carc.: Carcinogenicity
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
EN: European Standard
EQ: Excepted quantities
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
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
MFSU: Manufacture, formulation, supply and use
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.: Reproductive toxicity
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
STOT RE: Specific target organ toxicity - repeated exposure
SVHC: Substance of very high concern
TRGS: Technical Rules for Hazardous Substances
TSCA: Toxic Substance Control Act
vPvB: Very persistent and very bioaccumulative