

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

1.1 Product identifier

Trade name: ZZ 395

This safety data sheet pertains to the following products:
ZZ® 395 Fire Protection Casting Compound

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: Karl Zimmermann GmbH
Street/POB-No.: Marconistr. 7-9
Postal Code, city: 50769 Köln
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, Germany
Telephone: +49 551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Skin Irrit. 2; H315 Causes skin irritation.

Eye Irrit. 2; H319 Causes serious eye irritation.

2.2 Label elements

Labelling (CLP)



Signal word: **Warning**

Hazard statements: H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:

P264	Wash hands and face thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

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: Butadiene-polymers, ammonium salts and additives

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 251-459-0 CAS 33329-35-0	N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine	< 2.5 %	Acute Tox. 4; H312. Skin Corr. 1B; H314. Eye Dam. 1; H318. Aquatic Chronic 3; H412.
list no. 620-323-6 CAS 83653-00-3	Oxirane, phenyl-, polymer with oxirane, monoethyl ether	< 2.5 %	Aquatic Chronic 3; H412.

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:	First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. Seek medical attention.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
After swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Causes skin 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, 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.

Furthermore, there may develop: Ammonia, nitrogen oxides (NO_x), aluminium compounds, silicon compounds, sulphur oxides, carbon monoxide and carbon dioxide

5.3 Advice for firefighters

Special protective equipment for firefighters:

Use a breathing apparatus independent of the ambient air (isolated apparatus) and a full protection outfit (suit) against chemicals.

Additional information:

Hazchem-Code: -

Use fine water spray to cool endangered containers.

Do not allow water used to extinguish fire to enter drains, ground or waterways. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not breathe mist/vapours/spray. Avoid contact with the substance.

If possible, eliminate leakage. Provide adequate ventilation.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.

6.2 Environmental precautions

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

If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Never return spills in original containers for re-use.

Additional information:

Special danger of slipping by leaking/spilling product.

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. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:
Keep away from heat.
When handling larger quantities, take precautionary measures against electrostatic charging.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:
Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1309-37-1	Diiron trioxide	Great Britain: WEL-STEL	10 mg/m ³ (Smoke, calculated as Fe)
		Great Britain: WEL-TWA	10 mg/m ³ (inhalable fraction, red)
		Great Britain: WEL-TWA	4 mg/m ³ (respirable fraction, red)
		Great Britain: WEL-TWA	5 mg/m ³ (Smoke, calculated as Fe)
		Ireland: 15 minutes	10 mg/m ³ (Smoke, calculated as Fe)
		Ireland: 8 hours	10 mg/m ³ (inhalable fraction, Rouge)
		Ireland: 8 hours	4 mg/m ³ (respirable fraction, Rouge)
		Ireland: 8 hours	5 mg/m ³ (Smoke, calculated as Fe)

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 A-P2 according to EN 14387. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

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

Eye protection: Tightly sealed goggles according to EN 166.
Body protection: Wear suitable protective clothing.
General protection and hygiene measures:
Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing.
Take off contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
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

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Form: Pasty
Odour: No data available
Odour threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point/flash point range: No data available
Evaporation rate: No data available
Flammability: No data available
Explosion limits: No data available
Vapour pressure: No data available
Vapour density: No data available
Density: No data available
Solubility: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: No data available
Explosive properties: No data available
Oxidizing characteristics: None

9.2 Other information

Additional information: 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 humidity and water.
Keep away from heat.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition when used properly.

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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: Skin Irrit. 2; H315 = Causes skin irritation.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

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.

Other information: Information about N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine:
LD50 Rat, oral: 2,385 mg/kg
LD50 Rabbit, dermal: 976 mg/kg
LC50 Rat, inhalative: 1.8 mg/L/4h

Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Information about N,N-bis[3-(dimethylamino)propyl]-N',N'-dimethylpropane-1,3-diamine:
Fish toxicity:
EC50 *Oryzias latipes* (Ricefish): 430 mg/L/48h
Daphnia toxicity:
EC50 *Daphnia magna* (Big water flea): 48 mg/L/48h
Algae toxicity:
EC50 *Desmodesmus subspicatus* (green algae), growth rate: 74.9 mg/L/72h

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 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: 08 04 09* = Waste adhesives and sealants containing organic solvents or other dangerous substances
MFSU = manufacture, formulation, supply and use
* = Evidence for disposal must be provided.

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

ADR/RID, IMDG, IATA-DGR:
not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Marine pollutant:

no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

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

National regulations - Great Britain

Hazchem-Code:

-

No data available

National regulations - EC member states

Labelling of packaging with <= 125mL content



Signal word:

Warning

Hazard statements:

not applicable

Precautionary statements:

not applicable

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 75

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Further information

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

- H312 = Harmful in contact with skin.
- H314 = Causes severe skin burns and eye damage.
- H315 = Causes skin irritation.
- H318 = Causes serious eye damage.
- H319 = Causes serious eye irritation.
- H412 = Harmful to aquatic life with long lasting effects.

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
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC50: Effective Concentration 50%
- EC: European Community
- EN: European Standard
- EU: European Union
- MFSU: Manufacture, formulation, supply and use
- IATA: International Air Transport Association
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LC50: Median lethal concentration
- LD50: Lethal dose 50%
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- 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
- vPvB: Very persistent and very bioaccumulative

Reason of change: Changes in section 3: Composition/information on ingredients
General revision

Date of first version: 21/1/2021

Department issuing data sheet

Contact person: see section 1: Department responsible for information