

# Safety data sheet

according to Directive (EC) no. 1907/2006 and Directive (EU)  
no. 453/2010 (REACH)



Trading name: Zinc repair paint

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## 1. Material/preparation and company designation

### 1.1 Product identifier

Trading name: Zinc repair paint

Item number: 2362979

Type: ZABF

### 1.2 Relevant identified uses of the substance or mixture and uses we would not recommend: -

No further relevant information available.

#### Application of the substance / the mixture

Coating compound/ Surface coating/ paint

Coating

### 1.3 Manufacturer/supplier

OBO Bettermann Holding GmbH & Co. KG

P.O. Box 1120

58694 Menden

Germany

#### Division providing information

Customer Service

Tel.: +49 (0)2373 89-1700

E-mail: export@obo.de

### 1.4 Emergency telephone number

REACH Registration of Chemicals GmbH

Tel.: +49 (0)700 2411 2112 (OBO)

Tel.: +1 872 5888271 (OBO)

## 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### Categorisation according to EU Directive 1272/2008 (CLP)

Flam. Liq. 3	H226	Flammable liquid and vapour.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
STOT SE 3	H335	May cause respiratory irritation.
STOT RE 2	H373	May cause damage to the hearing organs through prolonged or repeated exposure.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

### 2.2 Labelling elements

#### Labelling according to Directive (EU) No. 1272/2008

The product is classified and labelled according to the CLP directive.

### Hazard pictograms



GHS02



GHS07



GHS08



GHS09

**Signal word** Warning

### Hazard-determining components of labelling:

xylene

Solvent naphtha (petroleum), light arom.

### Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H373 May cause damage to the hearing organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P280 Wear protective gloves / eye protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3 Other hazards

Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.




















### 3. Composition/information on ingredients

#### 3.1 Substances

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#### 3.2 Chemical characterisation: Mixtures

**Description:** Mixture of the substances listed below with non-hazardous additions.

<b>Dangerous components:</b>		
CAS: 7440-66-6 EINECS: 231-175-3 Reg.nr.: 01-2119467174-37	zinc powder -zinc dust (stabilized)  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	10 - < 25 %
CAS: 64742-95-6 EINECS: 265-199-0 Reg.nr.: 01-2119455851-35-XXXX	Solvent naphtha (petroleum), light arom.  Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H335-H336	10 - < 25 %
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32 01-2119555267-33	Xylene  Flam. Liq. 3, H226;  STOT RE 2, H373; Asp. Tox. 1, H304;  Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2,5 - < 10 %
CAS: 7429-90-5 Reg.nr.: 01-2119529243-45	aluminium powder (stabilized)  Flam. Sol. 1, H228	2,5 - < 10 %
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119486136-34	Xylene  Flam. Liq. 3, H226;  STOT RE 2, H373; Asp. Tox. 1, H304;  Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.1 . < 5%
CAS: 64742-82-1 Reg.nr.: 01-2119458049-33-XXXX	Naphtha (petroleum), hydrodesulfurized heavy  Flam. Liq. 3, H226;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H336	0.1≤5%
CAS: 100-41-4 EINECS: 202-849-4	Ethylbenzene  Flam. Liq. 3, H225;  STOT RE 2, H373; Asp. Tox. 1, H304;  Acute Tox. 4, H332	0.1 - < 2,5%

#### Additional information:

For the wording of the listed hazard phrases refer to section 16.

### 4. First aid measures

#### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product.

#### After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

#### After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

#### After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Do not induce vomiting; call for medical help immediately.

A person vomiting while laying on their back should be turned onto their side.

**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available. General information

**5. Firefighting measures**

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**5.1 Extinguishing media**

**Suitable extinguishing agent:**

CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

**Unsuitable extinguishing agents for safety reasons:** Water with full jet.

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

No further relevant information available.

**5.3 Advice for firefighters**

Protective equipment: Wear self-contained respiratory protective device..

**Additional information**

Cool endangered receptacles with water spray.

**6. Measures in the case of unintentional release**

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**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected people away.

Keep away from ignition sources.

Avoid contact with eyes and skin.

**6.2 Environmental protection measures**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

**6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents.

**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

**7. Handling and storage**

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**7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage:

#### Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

#### Information about storage in one common storage facility:

Store away from foodstuffs.

#### Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

**Storage class:** LGK 3 (TRGS 510) (only german directive)

## 7.3 Specific end applications

No further relevant information available.

## 8. Exposure controls/personal protection

### Additional information about design of technical facilities:

No further data, see item 7.

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

##### 1330-20-7 xylene

WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
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##### 100-41-4 ethylbenzene

WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm Sk
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#### DNEL values

##### Solvent naphtha (petroleum), light arom.

Dermal	DNEL long-term exposure – systemic effects	25 mg/kg bw/d (worker (Arbeiter/Arbeitnehmer))
Inhalative	DNEL long-term exposure - systemic effects	150 mg/m <sup>3</sup> (worker (Arbeiter/Arbeitnehmer))

##### 1330-20-7 xylene

Dermal	DNEL long-term exposure – systemic effects	180 mg/kg bw/d (worker (Arbeiter/Arbeitnehmer))
Inhalative	DNEL long-term exposure – systemic effects	77 mg/m <sup>3</sup> (worker (Arbeiter/Arbeitnehmer))

#### PNECs

##### 1330-20-7 xylene

PNEC STP (Kläranlage)	6.58 mg/l (sewage plant (Kläranlage))
PNEC (Sediment)	mg/kg (sediment (Sediment))
PNEC (Süßwasser)	0.327 mg/l (water (Wasser))

<b>Ingredients with biological limit values:</b>	
<b>1330-20-7 xylene</b>	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

**Additional information**

The lists valid during the making were used as basis.

**8.2 Exposure controls****Personal protective equipment: -****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Respiratory protection:**

In case of working at not adequately ventilated work places and spraying, breathing protection is obligatory.

We recommend a fresh air helmet or a composite filter (only for short-term jobs):

Filter A-P2 (EN 14387)

**Protection of hands:**

Solvent resistant gloves



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

e.g.:

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of the glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection**

Tightly sealed goggles

**Body protection:**

Protective work clothing

## 9. Physical and chemical properties

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### 9.1 Information on basic physical and chemical properties

#### General information

Appearance:

Form: Fluid

Colour: According to product specification

Odour: Characteristic

Odour threshold: Not determined.

pH value: Not determined.

Change in condition:

Melting point/melting range: Not determined.

Boiling point/boiling range: 137 °C

Flash point: 23 - 60 °C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 450 °C

Decomposition temperature: Not determined.

Self-ignition: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:

- Lower: 0.6 Vol %
- Upper: 7.0 Vol %

Vapour pressure at 20 °C: 210 hPa

Density at 20 °C: 1.5 -1.6 g/cm<sup>3</sup>

- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

Solubility/mixability in water: Not or barely mixable.

Distribution coefficient (n-octanol/water): Not determined.

Viscosity:

- Dynamic: Not determined.
- Kinematic at 20 °C: > 60 s (ISO 6 mm).

Solvent content:

- Organic solvents: 29 -32 %

Solids content: 68 - 78 %

### 9.2 Other information

VOC-Kat.: Kat A/i, 500 g/l (2010).

This product contains max. 500 g/l VOC.

## 10. Stability and reactivity

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### 10.1 Reactivity

No further relevant information available.

### 10.2 Chemical stability

**Thermal decomposition/conditions to be avoided:**

No decomposition if used according to specifications.

### 10.3 Possibility of hazardous reactions

Contact with water releases flammable gases.

### 10.4 Conditions to avoid

No further relevant information available.

**10.5 Incompatible materials**

No further relevant information available.

**10.6 Hazardous decomposition products**

No dangerous decomposition products known.

**11. Toxicological information****11.1 Acute toxicity**

Based on available data, the classification criteria are not met.

**LD/LC50 values relevant for classification:****Solvent naphtha (petroleum), light arom.**

Oral	LD50	>3,492 mg/kg (rat)
Dermal	LD50	>3,160 mg/kg (rabbit)
Inhalative	LC50/4 h	>6,193 mg/l (rat)

**1330-20-7 xylene**

Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	>4,200 mg/kg (rabbit)
Inhalative	LC50/4 h	11 mg/l (rat)

**64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	> 3160 mg/kg (rabbit)
Inhalative	LC50/6 h	12 mg/l (rat)

**11.2 Primary irritant effect****Skin corrosion/irritation**

- Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**12. Ecological information****12.1 Toxicity**

<b>Aquatic toxicity</b>	
<b>1330-20-7 xylene</b>	
LC50/96 h	>2.6 mg/l (fish)
EC50/48 h	>1.8 mg/l (daphnia)
<b>64742-82-1 Naphtha (petroleum), hydrodesulfurized heavy</b>	



LC50/96 h	10 mg/l (fish)
EC50/48 h	1-10 mg/l (daphnia)
IC50/72 h	> 1-10 mg/l (algae)

**12.2 Persistence and degradability**

No further relevant information available.

**12.3 Bioaccumulation potential**

No further relevant information available.

**12.4 Mobility in soil**

No further relevant information available.

**Ecotoxicological effects:**

**Remark:** Toxic for fish

**Additional ecological information:****General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

**12.5 Results of PBT and vPvB assessment**

- PBT: Not applicable..
- vPvB: Not applicable.

**12.6 Other adverse effects**

No further relevant information available.

**13. Disposal considerations****13.1 Waste treatment method****Recommendation:**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

Disposal according to official regulations.

**European Waste catalogue**

Waste code number: 08 01 11 = waste paint and varnish containing organic solvents or other hazardous substances

**Uncleaned packaging**

Recommendation: Disposal must be made according to official regulations.

**14. Transport information****14.1 UN number**

ADR, IMDG, IATA UN263

**14.2 UN proper shipping name**

ADR: 1263 PAINT, ENVIRONMENTALLY HAZARDOUS

IMDG: PAINT (zinc powder -zinc dust (stabilized), Solvent naphtha (petroleum), light arom.), MARINE POLLUTANT

IATA: PAINT

### 14.3 Transport hazard class(es)

#### ADR, IMDG



**Class** 3 Flammable liquids.

**Label** 3

#### IATA



**Class** 3 Flammable liquids.

**Label** 3

### 14.4 Packaging group

ADR, IMDG, IATA: III

### 14.5 Environmental risks

Product contains environmentally hazardous substances: zinc powder -zinc dust (stabilized)

**Marine pollutant:** Yes

Symbol (fish and tree)

**Special marking (ADR):** Symbol (fish and tree)

### 14.6 Special precautions for user

Warning: Flammable liquids.

Danger code (Kemler): 30

EMS number: F-E,S-E

Stowage Code: A

### 14.7 Transport in bulk according to Annex II

### 14.8 of Marpol and the IBC Code

Not applicable.

### 14.9 Transport/additional information

#### ADR

Limited quantity (LQ) 5 L

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

Transport category 3

Tunnel limitation code D/E

#### IMDG

Limited quantities (LQ) 5 L

Excepted quantities (EQ) Code E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

#### UN "Model Regulation"

UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

## 15. Regulatory information

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

#### Directive 2012/18/EU

Named dangerous substances - ANNEX I	None of the ingredients is listed.
Seveso category	E2 Hazardous to the Aquatic Environment P5c FLAMMABLE LIQUIDS
Qualifying quantity (tonnes) for the application of lower-tier requirements	200 t
Qualifying quantity (tonnes) for the application of upper-tier requirements	500 t
REGULATION (EC) No 1907/2006 ANNEX XVII	Conditions of restriction: 3

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## 16. Other data

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

#### Data sheet of issuing area:

Department: Technical documentation, see Item 1

#### Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Flam. Liq. 3: Flammable liquids – Category 3  
Flam. Sol. 1: Flammable solids – Category 1  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2