

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 03.07.2018

Version number 3

Revision: 02.07.2018

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

- **1.1 Product identifier**
- **Trade name: Rohrreparaturset C (Metallpulver)**
Pipe Repair Set C (metall powder)
- **UFI-Code:** UG40-G0NY-W00E-7RKV
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Sealant
Multi-pack product
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Fermit GmbH
Zur Heide 4,
D- 53560 Vettelschoß
www.fermit.de
- **Informing department:**
Tel.: +49 (0) 2645-2207
Fax: +49 (0) 2645-3113
Email: info@fermit.de
- **1.4 Emergency telephone number:** Tel.: +49 (0) 2645-2207

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS09

- **Signal word** Warning
- **Hazard-determining components of labelling:**
dibenzoyl peroxide

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- **Hazard statements**
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P102 Keep out of reach of children.
P261 Avoid breathing dust.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water.
P362+P364 Take off contaminated clothing and wash it before reuse.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific treatment (see on this label).
P391 Collect spillage.
P501 Dispose of contents/container to collection point for hazardous waste.
- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms**
GHS07
GHS09
- **Hazard-determining components of labelling:** dibenzoyl peroxide
- **Hazard statements** May cause an allergic skin reaction.
- **Precautionary statements**
Keep out of reach of children.
Avoid breathing dust.
Wear protective gloves / eye protection.
If skin irritation occurs: Get medical advice/attention.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture consisting of the following components.

- **Dangerous components:**

CAS: 7440-66-6 EINECS: 231-175-3 Reg.nr.: 01-211 946 7174-37-X	zinc powder -zinc dust (stabilized) ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	50 - 100%
CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35-X	barium sulphate, natural substance with a Community workplace exposure limit	10 - 25%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 01-2119463881-32-X	zinc oxide ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	2.5 - 10%
CAS: 94-36-0 EINECS: 202-327-6 Reg.nr.: 01-2119511472-50-X	dibenzoyl peroxide ⚠ Org. Perox. B, H241; ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	≥ 1 - < 2.5%

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation**
Take affected persons into the open air and position comfortably
Seek medical treatment in case of complaints.
- **After skin contact**
Remove contaminated clothing.
Instantly wash with water and soap and rinse thoroughly.
Wash contaminated clothing before re-use.
- **After eye contact**
Rinse opened eye for several minutes under running water.
Do not rub eyes dry, the mechanical stress can cause additional cornea damages.
Call a doctor immediately.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Seek immediate medical advice.
Do not induce vomiting.
- **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.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **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 breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or water bodies.
Inform respective authorities in case product reaches water or sewage system.
Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Collect mechanically.
- **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 information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Avoid contact with eyes, skin and clothes.
Prevent formation of dust.
Provide suction extractors if dust is formed.
Any deposit of dust which cannot be avoided must be removed regularly.

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- **Information about protection against explosions and fires:**
Dust can combine with air to form an explosive mixture.
Store it away from ignition sources or open fire.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store only undamaged original packaging drums.
Keep container tightly closed.
- **Information about storage in one common storage facility:**
Store away from water.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Store away from oxidising agents.
- **Further information about storage conditions:**
Store under dry conditions.
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
WEL: workplace exposure limit

7727-43-7 barium sulphate, natural

WEL (Great Britain)	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
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94-36-0 dibenzoyl peroxide

WEL (Great Britain)	Long-term value: 5 mg/m ³
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· DNELs

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	DNEL (consumer, long-term, systemic)	0.83 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	83 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	83 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	5 mg/m ³ (human)
	DNEL (consumer, long-term, systemic)	2.5 mg/m ³ (human)

1314-13-2 zinc oxide

Oral	DNEL (consumer, long-term, systemic)	0.83 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	83 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	83 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	5 mg/m ³ (human)
	DNEL (consumer, long-term, systemic)	2.5 mg/m ³ (human)

· PNECs

7440-66-6 zinc powder -zinc dust (stabilized)

PNEC aqua (freshwater)	0.0206 mg/L (.)
PNEC aqua (marine water)	0.0061 mg/L (.)
PNEC STP	0.052 mg/L (.)
PNEC soil	35.6 mg/kg soil dw (.)
PNEC sediment (freshwater)	117.8 mg/kg sedim. dw (.)
PNEC sediment (marine water)	56.5 mg/kg sedim. dw (.)

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1314-13-2 zinc oxide

PNEC aqua (freshwater)	0.00206 mg/L (.)
PNEC aqua (marine water)	0.00061 mg/L (.)
PNEC STP	0.0052 mg/L (.)
PNEC soil	35.6 mg/kg soil dw (.)
PNEC sediment (freshwater)	117.8 mg/kg sedim. dw (.)
PNEC sediment (marine water)	56.5 mg/kg sedim. dw (.)

- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Take off all contaminated clothing immediately.
Do not eat, drink or smoke while working.
Wash hands during breaks and at the end of the work.
- **Breathing equipment:**
Approved dust respirators must be used for dusty conditions or if dust levels exceed established standards.
When dusts are generated, wear respiratory protection.
Filter P2.
- **Protection of hands:**
Synthetic gloves
Plastic gloves
- **Material of gloves**
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 glove material**
With solid dry substances permeation is not to be expected. Therefore the breakthrough-time for this protective glove has not been measured.
- **For the permanent contact gloves made of the following materials are suitable:**
Nitrile rubber, NBR
PVC or PE gloves
Neoprene gloves
- **Eye protection:**
Not required.
Where dusting potential exist, goggles should be worn.
- **Limitation and supervision of exposure into the environment**
Avoid the uncontrolled release into the environment.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Powder
Colour:	Grey
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**

Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined

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· Flash point:	Not applicable
· Inflammability (solid, gaseous)	Not determined.
· Decomposition temperature:	Not determined.
· Self-inflammability:	Product is not selfigniting.
· Explosive properties:	Product is not explosive.
· Vapour pressure:	Not applicable.
· Density at 20 °C	5.39 g/cm ³
· Solubility in / Miscibility with Water:	Insoluble
· Partition coefficient: n-octanol/water:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Avoid humidity.
- **10.3 Possibility of hazardous reactions**
In contact with water hydrogen is generated, which can form explosive atmospheres.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Acids, bases, oxidizers.
- **10.6 Hazardous decomposition products:**
None in case of intended use and storage in compliance with instructions.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

7440-66-6 zinc powder -zinc dust (stabilized)

Oral	LD50	> 2,000 mg/kg (rat) (OECD 401)
Inhalative	LC50	> 5.4 mg/l/4h (rat) (OECD 403)

1314-13-2 zinc oxide

Oral	LD50	> 5,000 mg/kg (rat) (OECD 401)
Inhalative	LC50	> 5,700 mg/l/4h (rat) (OECD 403)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.

· **Repeated dose toxicity**

1314-13-2 zinc oxide

Oral	NOAEL (90d)	> 81 mg/kg bw/day (ferret)
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- **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.

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- **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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

7440-66-6 zinc powder -zinc dust (stabilized)

EC50 (static)	1.833 mg/l/48h (Daphnia magna) (OECD 202)
LC50	0.439 mg/l/96h (Cottus bairdii)
NOEC (static)	0.05 mg/l/72h (Pseudokirchneriella subcapitata) (OECD 201)

1314-13-2 zinc oxide

EC50 (static)	2.6 mg/l/48h (Daphnia magna) (OECD 202)
LC50 (static)	1.793 mg/l/96h (Brachydario rerio)
EC50 (static)	0.136 mg/l/72h (Pseudokirchneriella subcapitata)

· 12.2 Persistence and degradability

Based on previous experience, this product is inert and non-degradable.

· Other information:

There are no data available about the preparation.

· 12.3 Bioaccumulative potential

Does not accumulate in organisms

· 12.4 Mobility in soil

No further relevant information available.

· 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 bodies or sewage system.

Also poisonous for fish and plankton in water bodies.

Very 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.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

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

The waste code numbers mentioned are recommendations based on the probable use of the product.

· European waste catalogue

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 04 00	metal-containing wastes other than those mentioned in 06 03
06 04 05*	wastes containing other heavy metals
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 02 00	wastes from MFSU of other coatings (including ceramic materials)
08 02 01	waste coating powders

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16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 03 00	off-specification batches and unused products
16 03 03*	inorganic wastes containing dangerous substances

· **Uncleaned packagings:**

· **Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Non contaminated packagings can be used for recycling.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14: Transport information

- **14.1 UN-Number**
· **ADR, IMDG, IATA**

UN3077

- **14.2 UN proper shipping name**
· **ADR**

3077 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (zinc powder -zinc
dust (stabilized), zinc oxide)

- **IMDG**

ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (zinc powder -zinc
dust (stabilized), zinc oxide), MARINE
POLLUTANT

- **IATA**

ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, SOLID, N.O.S. (zinc powder -zinc
dust (stabilized), zinc oxide)

- **14.3 Transport hazard class(es)**

- **ADR**



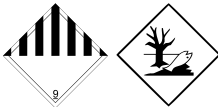
- **Class**

9 (M7) Miscellaneous dangerous substances and
articles.

- **Label**

9

- **IMDG, IATA**



- **Class**

9 Miscellaneous dangerous substances and
articles.

- **Label**

9

- **14.4 Packing group**
· **ADR, IMDG, IATA**

III

- **14.5 Environmental hazards:**

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

- **Marine pollutant:**

Symbol (fish and tree)

- **Special marking (ADR):**

Symbol (fish and tree)

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· Special marking (IATA):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kemler Number:	90
· EMS Number:	F-A,S-F
· Segregation groups	Powdered metals
· Stowage Category	A
· Stowage Code	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	

· ADR	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· Transport category	3
· Tunnel restriction code	E

· IMDG	
· Limited quantities (LQ)	5 kg
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC POWDER - ZINC DUST (STABILIZED), ZINC OXIDE), 9, III

SECTION 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** E1 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is contained.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H241 Heating may cause a fire or explosion.

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H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing data specification sheet:**

This Material Safety Data Sheet has been drawn up in cooperation with:
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 phone: (+49) 511 42079 - 0, reach@dekra.com.
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· **Abbreviations and acronyms:**

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)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Org. Perox. B: Organic peroxides – Type B
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Skin sensitisation – 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

· *** Data compared to the previous version altered.**

GB