

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Diemet powder copper**

hardener powder for Diemet fluid

CAS No.: --
EG No.: --
INDEX No.: --
REACH No.: --**1.2. Relevant identified uses of the substance or mixture and uses advised against**Relevant identified uses: Curing agent Filler
Uses advised against: Other**1.3. Details of the supplier of the safety data sheet****Manufacturer**ERKODENT Erich Kopp GmbH
Siemensstrasse 3

Telephone: +49 7445 8501 0

Telefax: +49 7445 2092

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D 72285 Pfalzgrafenweiler**Supplier (manufacturer/importer/only representative/downstream user/distributor)**ERKODENT Erich Kopp GmbH
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D 72285 Pfalzgrafenweiler**Information contact**

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Information telephone: +49 7445 8501 21

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1.4. Emergency telephone numberERKODENT Erich Kopp GmbH
Only available during office hours.

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SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Regulation (EC) No 1272/2008:

Skin Sens. 1/1A/1B, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 3, H412

2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



Signal word:

GHS07, GHS09

Warning

Hazard statements:

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+352 IF ON SKIN: Wash with plenty of water/?.

P333+313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container to .?.

Hazardous component(s) for labelling

Dibenzoylperoxid; Copper, Powder

Special labelling of particular preparations:

none

2.3. Other hazards

Inhalation of dust may cause irritation of the respiratory system.

SECTION 3: Composition / information on ingredients

3.1. Substances

Mixtures

3.2. Mixtures

Filler Organic peroxides

Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):
Copper, Powder	231-159-6	7440-50-8			90 - 95%	Aquatic Acute 1, H400; Aquatic Chronic 3, H412
Dibenzoylperoxid	202-327-6	94-36-0			< 1,0%	Self-react./Org. Perox. B, H241; Skin Sens. 1/1A/1B, H317; Eye Irrit. 2, H319

(Full text of H- and EUH-phrases: see section 16.)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information: No special measures are necessary.

Following inhalation: Provide fresh air. In case of troubles or persistent symptoms, consult an ophthalmologist. Rinse mouth thoroughly with water.

Following skin contact: After contact with skin, wash immediately with plenty of water and soap. Seek medical attention if problems persist. In case of skin irritation, consult a physician.

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion: In case of troubles or persistent symptoms, consult an ophthalmologist. Rinse mouth immediately and drink plenty of water.

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

No information available.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO₂), dry extinguishing powder, alcohol resistant foam.

Unsuitable extinguishing media: High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic.

5.3. Advice for firefighters

General information

Co-ordinate fire-fighting measures to the fire surroundings. Use water spray jet to protect personnel and to cool endangered containers.

Special protective equipment for firefighters:

In case of fire: Wear self-contained breathing apparatus. Wear chemical resistant suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Wear personal protection equipment. Remove all sources of ignition. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advices on safe handling

Avoid generation of dust.

Precautions against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Put lids on containers immediately after use.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Storage class: 13

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit value

Substance:	CAS-No.:		Source :	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m³]	Limitation of exposure peaks:	Remark:
Copper, Powder	7440-50-8	EN	AGW		1E		Zt. Out of power
Dibenzoylperoxid	94-36-0	EN	TRGS 900		5 E	1 (I)	DFG

Substance with a common (EC) occupational exposure limit value

Substance:	CAS-No.:		Source :	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m³]	Limitation of exposure peaks:	Remark:

DNEL-/PNEC-values

DNEL value

Substance:	CAS-No.:	DNEL/DMEL
Dibenzoylperoxid	94-36-0	population oral long-term, systemic 2 mg/kg bw/day worker dermal long-term, systemic 13,3 mg/kg bw/day worker inhalative long-term, systemic 39 mg/m³

PNEC Value

Substance:	CAS-No.:	PNEC
Dibenzoylperoxid	94-36-0	sediment, marine water 0,001 mg/kg sed dw aquatic, freshwater 0,00002 mg/l (AF50) sediment, freshwater 0,013 µg/kg dw aquatic, marine water 0,000002 mg/l (AF500) sewage treatment plant 0,35 mg/l

Remark:
 none

8.2. Exposure controls

Occupational exposure controls

none

General protection and hygiene measures

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Take off immediately all contaminated clothing.

Personal protection equipment

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Technical ventilation of workplace.

Hand protection

Suitable gloves type: Butyl rubber. liquid-tight Solvent/Thinner.

Eye/face protection

Eye protection: not required.

Body protection

Body protection: not required.

Environmental exposure controls

refer to chapter 7. No further action is necessary.

Consumer exposure controls

refer to chapter 7. No further action is necessary.

Exposure Scenario

none

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state: Powder
Colour: various
Odour: characteristically
Odour threshold: No data available

Safety relevant basis data

	Parameter	Value	Unit	Remark
pH:				not determined
Melting point/freezing point:		700 - 1083	°C	
Initial boiling point and boiling range:				not determined
Flash point:			°C	not determined
Evaporation rate:				not applicable
Flammability (solid, gas):				not determined
Explosive properties:				not explosive.
Lower flammability or explosive limits:				not determined
Upper flammability or explosive limits:				not determined
Vapour pressure:				not applicable
Vapour density:				not applicable
Relative density:	at 20°C.	8,0-8,8	g/cm ³	
Density:	at 20°C.	8,0-8,9	g/cm ³	not determined
Solubility(ies):	:			not determined
Water solubility:				practically insoluble
Fat solubility:				not determined

Partition coefficient: n-octanol/water:	not determined
Auto-ignition temperature:	none Risk of selfignition.
Decomposition temperature:	not determined
Viscosity:	not applicable
Oxidising properties:	not determined
Solvent content:	0,0 %

9.2. Other information

Solid content (%) 100

SECTION 10: Stability and reactivity

10.1. Reactivity

Polymerization.

10.2. Chemical stability

none slow decomposition spontaneous decomposition

10.3. Possibility of hazardous reactions

none Possibility of hazardous reactions

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Data apply to the main component.

M-factor:	-	Acute toxicity (dermal):	--
Acute toxicity (oral):	--	Acute toxicity (inhalative):	--

Acute toxicity

Substance:	CAS-No.:	Toxicological information
Dibenzoylperoxid	94-36-0	LD50 oral (rat) > 5000 mg/kg

Skin corrosion/irritation

none

Serious eye damage/irritation

irritant.

Respiratory or skin sensitisation

No known symptoms to date.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity
No information available.
Germ cell mutagenicity
No information available.
Reproductive toxicity
No information available.

STOT-single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration hazard

slightly irritant but not relevant for classification.

SECTION 12: Ecological information

12.1. Toxicity

The information about ecology refers to the main components.

Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Dibenzoylperoxid	94-36-0	EC50 Algae (72 h) 0,0711 mg/l LC50 fish (96 h) 0,0602 mg/l EC50 Daphnia (Daphnia magna) 48 h 0,11 mg/l

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal/Product:

Do not allow to enter into surface water or drains. Dispose of waste in own country; otherwise, follow EC regulations. Waste disposal according to EC Directives 75/442/EEC and 91/689/EEC on waste and hazardous waste in their latest versions.

Appropriate disposal / Package:

Dispose of waste according to applicable legislation.

List of proposed waste codes/waste designations in accordance with EWC

Send to a hazardous waste incinerator facility under observation of official regulations.

Waste code product: -
Waste code packaging: -

SECTION 14: Transport information

14.1. UN number

UN No.: 3077

14.2. UN proper shipping name

ADR / RID

UMWELTGEFÄHRDENDER STOFF, FEST, N.A.G. (Kupfer)
Kupfer, Pulver

IMDG / ICAO-TI / IATA-DGR

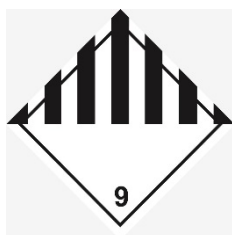
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID; N.O.S. (Copper)
Copper, powder(Kupfer, Pulver)

14.3. Transport hazard class(es)

Hazard label(s):: 9

Classification Code:

M7



14.4. Packing group

Packing Group: III

14.5. Environmental hazards

Labelling environmentally hazardous substances

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR: yes / no

Marine Pollutant: yes / no

14.6. Special precautions for user

Land transport (ADR/RID)

Transport category: 3

Special provisions: 274, 335, 375, 601

Tunnel restriction code: E

Limited quantity (LQ): 5 kg

Sea transport (IMDG)

EmS-No: F-A, S-F

Special provisions: --

Limited quantity (LQ): 5 kg

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

Remark: No dangerous good in sense of these transport regulations. <= 5000 g

SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register:

No information available.

Regulation (EC) No 1005/2009 on substance that deplete the ozone layer:

No information available.

Regulation (EC) No 648/2004 on detergents:

No information available.

Regulation (EC) No 850/2004 on persistent organic pollutants:

No information available.

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals:

No information available.

Restrictions according to Title VIII of Regulation (EC) No 1907/2006:

No information available.

National regulations

Observe in addition any national regulations!

Restrictions of occupation

No information available.

Other regulations, restrictions and prohibition regulations

No information available.

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for this substance: --

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Relevant H- and EUH-phrases (Number and full text)

Hazard statements

H241	Heating may cause a fire or explosion.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Training advice

none

Recommended restrictions of use

none

Further information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Documentation of changes

none

Key literature references and sources for data

none

Abbreviations and acronyms

AC: Artikelkategorie (Article Category)

ACGIH: Rat für Arbeitsschutz und Gefahrstoffe, Amerika (American Conference of Government Industrial Hygienists)

ADN: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnengewässern (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße (Accord européen relatif transport des marchandises dangereuses par route)

AGW: Arbeitsplatzgrenzwert

AOX: Adsorbierbare organisch gebundene Halogene (Adsorbable Organic halogen compounds)

Bw: Körpergewicht (Body weight)

CMR: Stoffe klassifiziert als Krebs erzeugend, Mutagen oder Reproduktionstoxisch (Carcinogenic, Mutagenic, toxic for Reproduction)

CSR: Stoffsicherheitsbericht (Chemical Safety Report)

DIN: Deutsches Institut für Normung / Deutsche Industrienorm

DNEL: Grenzwert, unterhalb dessen der Stoff keine Wirkung ausübt (Derived No Effect Level)

DPD: Zubereitungsrichtlinie / Richtlinie 1999-45-EC (Dangerous Preparations Directive)

DSD: Stoffrichtlinie / Richtlinie 67-548-EC (Dangerous Substances Directive)

DU: Nachgeschalteter Anwender (Downstream User)

EC50: Wirksame Konzentration 50% (Effective Concentration 50%)

ECHA: Europäische Chemikalienagentur

EN: Europäische Norm

EWC/EWL: Europäischer Abfallartenkatalog (European Waste Catalogue)

IATA: Verband für den internationalen Lufttransport (International Air Transport Association)

IBC: Großpackmittel (Intermediate Bulk Container)

ICAO: Internationale Zivilluftfahrt-Organisation (International Civil Aviation Organization)

IMDG Code: Gefahrgutvorschriften für den internationalen Seetransport (International Maritime Dangerous Goods Code)

IMO: Internationale Seeschiffahrts-Organisation (International Maritime Organization)

ISO: Internationale Normungsorganisation (International Standards Organisation)

LC50: Lethale (Tödliche) Konzentration 50%

LD50: Lethale (Tödliche) Dosis 50%

LEV: Lokale Absaugung (Local exhaust ventilation)

MAK: Maximale Arbeitsplatzkonzentration – DFG

n.a.: nicht anwendbar

n.b.: nicht bestimmt

OEL: Arbeitsplatzgrenzwert (Occupational Exposure Limit)

PBT: persistent, bioakkumulierbar, giftig (persistent, bioaccumulative, toxic)

PNEC: Abgeschätzte Nicht-Effekt-Konzentration (Predicted No Effect Concentration)

PPE/PSA: Persönliche Schutzausrüstung (Personal Protective Equipment)

REACH: Registrierung, Bewertung und Zulassung von Chemikalien (Registration, Evaluation and Authorization of Chemicals)

RID: Gefahrgutvorschriften für den Transport mit der Eisenbahn (Règlement International concernant le transport de marchandises dangereuses par chemin de fer)

STEL: Grenzwert für Kurzzeitexposition (Short-term Exposure Limit)

SVHC: Stoff sehr hoher Besorgnis (Substance of Very High Concern)

TLV: Arbeitsplatzgrenzwert (Threshold Limit Value)

VOC: Flüchtige organische Kohlenwasserstoffe (Volatile Organic Compounds)

vPvB: sehr persistent, sehr bioakkumulierbar (very persistent, very bioaccumulative)