



REIMBOLD & STRICK

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### KGE 224

Revision date: 27.07.2017

Product code: KGE-224

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

### 1.1. Product identifier

KGE 224

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture

Industrial uses

### 1.3. Details of the supplier of the safety data sheet

Company name: REIMBOLD & STRICK  
Handels- und Entwicklungsgesellschaft für chemisch-keramische Produkte mbh  
Street: Hansestr. 70  
Place: D-51149 Köln  
Post-office box: 92 04 35  
D-51154 Köln  
Telephone: +49 2203 8985-0  
Telefax: +49 2203 8985-260  
e-mail: info@reibold-und-strick.de  
Internet: www.reibold-und-strick.de

### 1.4. Emergency telephone number:

Giftnotruf Berlin 030 30686 790 Beratung in Deutsch und Englisch (24h Mo-So)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

Pictograms:



#### Hazard statements

H411 Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container to an approved waste disposal company.

#### Special labelling of certain mixtures

EUH208 Contains Cobalt oxide . May produce an allergic reaction.

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
1314-13-2	zinc oxide			5 - < 10 %
	215-222-5	030-013-00-7	01-2119463881-32	
	Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H400 H410			
1308-06-1	Cobalt oxide			< 1 %
	215-157-2			
	Carc. 2, Resp. Sens. 1, Aquatic Chronic 3; H351 H334 H412			

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Provide fresh air.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

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**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

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

Non-flammable.

**5.3. Advice for firefighters**

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

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.



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### 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

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid dust formation. Do not breathe dust.

#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed.

#### Advice on storage compatibility

Avoid unnecessary contact with food.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
-	Cobalt and cobalt compounds (as Co)	-	0.1		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

#### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
1314-13-2	zinc oxide			
Worker DNEL, long-term		inhalation	systemic	5 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	0,5 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	83 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,5 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	83 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,83 mg/kg bw/day

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**PNEC values**

CAS No	Substance	
	Environmental compartment	Value
1314-13-2	zinc oxide	
	Freshwater	0,020 mg/l
	Marine water	0,006 mg/l
	Freshwater sediment	117,8 mg/kg
	Marine sediment	56,5 mg/kg
	Micro-organisms in sewage treatment plants (STP)	0,1 mg/l
	Soil	35,6 mg/kg

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

**Protective and hygiene measures**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**Eye/face protection**

Wear safety glasses with side-shields in circumstances where there is a risk of penetrative eye injuries.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

In case of prolonged exposure to airborne dust concentrations, wear a respiratory protective equipment that complies with the requirements of European or national legislation.

The use of half or full face masks with filters against particles of category 2 or 3 (FP2 - FP3) is recommended.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state: Powder  
Colour: violet  
Odour: odourless

**Test method**

pH-Value: not determined

**Changes in the physical state**

Melting point: not determined

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Initial boiling point and boiling range: not determined

Flash point: not applicable

**Flammability**

Solid: not determined

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

**Auto-ignition temperature**

Solid: not determined

Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties**

Not oxidising.

Vapour pressure: not determined

Density: not determined

**Solubility in other solvents**

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

**9.2. Other information**

Solid content: not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

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



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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1314-13-2	zinc oxide				
	oral	LD50 >5000 mg/kg	Rat		
	inhalative (4 h) aerosol	LC50 5,7 mg/l	Rat		

### Irritation and corrosivity

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

### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

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

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1314-13-2	zinc oxide					
	Acute algae toxicity	ErC50 0,17 mg/l	72 h	Selenastrum capricornutum		
1308-06-1	Cobalt oxide					
	Acute fish toxicity	LC50 > 136 mg/l	96 h	Fish		
	Acute crustacea toxicity	EC50 > 136 mg/l	48 h	Daphnie		

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The product has not been tested.

### 12.6. Other adverse effects

No information available.

### Further information

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

## SECTION 13: Disposal considerations

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**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:**

UN 3077

**14.2. UN proper shipping name:**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains zinc oxyde)**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 601

Limited quantity:

5 kg

Excepted quantity:

E1

Transport category:

3

Hazard No:

90

**Inland waterways transport (ADN)****14.1. UN number:**

UN 3077

**14.2. UN proper shipping name:**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains zinc oxyde)**14.3. Transport hazard class(es):**

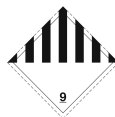
9

**14.4. Packing group:**

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 601

Limited quantity:

5 kg

Excepted quantity:

E1

**Marine transport (IMDG)****14.1. UN number:**

UN 3077

**14.2. UN proper shipping name:**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains zinc oxide)**14.3. Transport hazard class(es):**

9

**14.4. Packing group:**

III

Hazard label:

9

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Special Provisions: 274, 335, 966, 967  
 Limited quantity: 5 kg  
 Excepted quantity: E1  
 EmS: F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 3077  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (contains zinc oxide)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9



Special Provisions: A97 A158 A179  
 Limited quantity Passenger: 30 kg G  
 Passenger LQ: Y956  
 Excepted quantity: E1  
 IATA-packing instructions - Passenger: 956  
 IATA-max. quantity - Passenger: 400 kg  
 IATA-packing instructions - Cargo: 956  
 IATA-max. quantity - Cargo: 400 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Zinc oxide

**14.6. Special precautions for user**

No information available.

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

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
 Water contaminating class (D): 2 - water contaminating

**15.2. Chemical safety assessment**

For the following substances of this mixture a chemical safety assessment has been carried out:  
 zinc oxide

**SECTION 16: Other information****Changes**



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8,14,15

**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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Relevant H and EUH statements (number and full text)**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 Suspected of causing cancer.

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.

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains Cobalt oxide. May produce an allergic reaction.

**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.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*