

Safety Data Sheet

according to UK REACH Regulation



Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 1 of 9

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

1.1. Product identifier

Glaze 8283 Zinkkristall

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

Use of the substance/mixture

Manufacture of ceramic coatings suited for firing ceramics.

1.3. Details of the supplier of the safety data sheet

Company name:	TerraColor GmbH	
Street:	Manderscheidstr. 90	
Place:	D-45141 Essen	
Telephone:	+49 (0) 201 293300	Telefax: +49 (0) 201 2944389
E-mail:	info@terracolor.de	
Contact person:	Dr. Monika Szurman	
E-mail:	sdb@terracolor.de	
Internet:	www.terracolor.de	

1.4. Emergency telephone number: +49 (0) 201 293300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

STOT RE 2; H373
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Quartz (fine fraction)
zinc oxide

Signal word: Warning

Pictograms:



Hazard statements

H373 May cause damage to organs (lung) through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust.
P273 Avoid release to the environment.
P284 Wear respiratory protection.
P391 Collect spillage.
P501 Dispose of contents/container to according to local regulations to a treatment center.

2.3. Other hazards

The mixture does not contain substances classified as PBT.
The mixture does not contain substances classified as vPvB.
The mixture does not contain any endocrine disrupting properties substances.

Safety Data Sheet

according to UK REACH Regulation



Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 2 of 9

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of mineral oxides, metal oxides and inorganic pigments.

Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (GB CLP Regulation)	
1314-13-2	zinc oxide	< 25 %
	215-222-5	030-013-00-7
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	
14808-60-7	Quartz (fine fraction)	< 5 %
	238-878-4	
	STOT RE 1; H372	
12069-69-1	copper(II) carbonate - copper(II) hydroxide (1:1)	< 2,5 %
	235-113-6	029-020-00-8
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H332 H302 H319 H400 H410	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
1314-13-2	215-222-5	zinc oxide	< 25 %
		oral: LD50 = > 5000 mg/kg	
12069-69-1	235-113-6	copper(II) carbonate - copper(II) hydroxide (1:1)	< 2,5 %
		inhalation: ATE 1,2 mg/l (dusts or mists); oral: ATE 500 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated or saturated clothing.

After inhalation

Take affected persons out into the fresh air.

After contact with skin

Precautionally wash off with soap and water.

After contact with eyes

In case of contact with eyes rinse thoroughly with water.

After ingestion

In the event of symptoms refer for medical treatment.

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

This product contains quartz (fine fraction). Depending on the type of handling and use (e.g. grinding, drying), airborne respirable crystalline silica may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 3 of 9

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. Extinguishing powder./Carbon dioxide (CO₂).

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

none known

5.3. Advice for firefighters

Employ protective equipment commonly used in the event of fire.

Additional information

Dispose of waste according to applicable legislation. 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

General advice

Wear personal protection equipment. Provide adequate ventilation. Avoid dust formation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

Collect spillage.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Take up dust-free and set down dust-free. Collect in closed and suitable containers for disposal.

6.4. Reference to other sections

Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid production of dust. Do not breathe dust. Open windows to ensure natural ventilation.

When using do not eat, drink or smoke.

Avoid release to the environment.

Advice on protection against fire and explosion

Avoid generation of dust.

Advice on general occupational hygiene

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Further information on handling

Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 4 of 9

Requirements for storage rooms and vessels

Keep container tightly closed.
Keep out of the reach of children.

Hints on joint storage

No special restrictions on substances.

Further information on storage conditions

Product is water-pollutive. Observe the national and local regulations concerning handling and storage.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Observe general dust limit MAK (A = respirable fraction): 1,25 mg/m³.

8.2. Exposure controls

Appropriate engineering controls

Minimise airborne dust generation. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne particles below the exposure limit. Apply organisational measures, e.g. by isolating personnel from dusty areas. Remove and wash soiled clothing.

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

If necessary: Wear tightly sealed safety glasses.

Hand protection

Wear protective gloves made of the following materials: NBR (Nitrile rubber).

Skin protection

Wear personal protection equipment.

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. See EN 143: 2000 - Respiratory protective devices. Particle filters.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Powder	
Colour:	dark pink	
Odour:	odourless	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not determined
Flash point:		not applicable
Decomposition temperature:		not available
Water solubility:		not determined

Safety Data Sheet

according to UK REACH Regulation



Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 5 of 9

Density:

not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

It does not contain chemical groups associated with explosive properties.

Further Information

no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

none known

10.4. Conditions to avoid

No dangerous reaction known under conditions of normal use.

10.5. Incompatible materials

none known

10.6. Hazardous decomposition products

none known

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

Acute, oral toxicity

frits, chemicals; CAS-Nr.: 65997-18-4; EG-Nr.: 266-047-6; LD50: > 2.000,00 mg/kg (Species: Rat)

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l; ATE (inhalation gas) > 20000 ppm

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1314-13-2	zinc oxide				
	oral	LD50 > 5000 mg/kg	Rat	IUCLID	
12069-69-1	copper(II) carbonate - copper(II) hydroxide (1:1)				
	oral	ATE 500 mg/kg			
	inhalation dust/mist	ATE 1,2 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Powder can cause localised skin irritation in folds of the skin or under tight clothing.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 6 of 9

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

May cause damage to organs through prolonged or repeated exposure. (Quartz (fine fraction))

This product contains quartz (fine fraction) as an impurity and therefore is classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008 Prolonged and/or massive exposure to respirable crystalline silica-containing dust may cause silicosis, a nodular pulmonary fibrosis caused by deposition in the lungs of fine respirable particles of crystalline silica. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated. (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk (SCOEL SUM Doc 94-final, June 2003). So there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting the existing regulatory occupational exposure limits and implementing additional risk management measures where required (see section 16 below).

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

no data available

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
no data available

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Toxic to aquatic life with long lasting effects.
Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 7 of 9

Disposal recommendations

Collect in closed and suitable containers for disposal. Prevent penetration into soil, stretches of water and drainage systems.

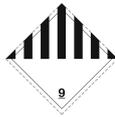
Contaminated packaging

Dispose of as unused product. If there is product residue in the emptied container, follow directions for handling on the container's label.

SECTION 14: Transport information

Land transport (ADR/RID)

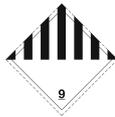
14.1. UN number or ID number: UN 3077
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M7
 Special Provisions: 274 335 375 601
 Limited quantity: 5 kg
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 90
 Tunnel restriction code: -

Inland waterways transport (ADN)

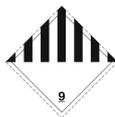
14.1. UN number or ID number: UN 3077
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Classification code: M7
 Special Provisions: 274 335 375 601
 Limited quantity: 5 kg
 Excepted quantity: E1

Marine transport (IMDG)

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



Special Provisions: 274, 335, 966, 967, 969
 Limited quantity: 5 kg

Safety Data Sheet

according to UK REACH Regulation



Glaze 8283 Zinkkristall

Revision date: 15.07.2025

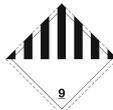
Product code: 8483

Page 8 of 9

Excepted quantity: E1
EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

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



Special Provisions: A97 A158 A179 A197
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



SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 0

Information according to Directive 2012/18/EU (SEVESO III): E2 Hazardous to the Aquatic Environment

Additional information

REACH - List of substances subject to authorization (Annex XIV): Not prohibited and/or restricted.

Regulation (EC) No. 649/2012 of the European Parliament and of the Council on the export and import of dangerous chemicals: not applicable.

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such

Safety Data Sheet

according to UK REACH Regulation



Glaze 8283 Zinkkristall

Revision date: 15.07.2025

Product code: 8483

Page 9 of 9

material used in combination with any other materials or in any process, unless specified in the text.

Abbreviations and acronyms

Acute Tox: Acute toxicity

Eye Irrit: Eye irritation

STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Acute: Acute aquatic hazard

Aquatic Chronic: Chronic aquatic hazard

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs (lung) through prolonged or repeated exposure.
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.

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