

Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Version 2.0

SECTION 1 Chemical product and company identification

Product identifier

Product form Mixture

Name Gre. Gleitmittel DX Product code BU Direct Fastening

Chemical Chinese name Chemical English name -

Recommended use of the Ceramic Paste

chemica1

Details of the supplier of the safety data sheet

Supplier

Hilti (China) Ltd. 8F, Tower 2, No.58 Yao Yuan

Pudong District

200126 Shanghai - China

T + 86 21 6016 7316

Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100

9494 Schaan - Liechtenstein

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product.compliance-direct.fastening@hilti.com

Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number)

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number
China	中国境内化学事故应急咨询电话 / chemical accident emergency consultation service hotline (24/7)		+86 532 83889090

SECTION 2 Hazards identification

Emergency overview

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Treat symptomatically, white. None under recommended storage and handling conditions (see section 7). Under normal conditions of storage and use, hazardous decomposition products should not be produced. Dust/Mist. characteristic. The product is non-reactive under normal conditions of use, storage and transport. Non flammable. No dangerous reactions known under normal conditions of use. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Very toxic to aquatic life with long lasting effects

GHS hazard classification

Environmental hazards Hazardous to the aquatic environment – Acute hazard,

Category 1

Hazardous to the aquatic environment - Chronic

hazard, Category 1

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

Hazard pictograms (GHS CN)



Signal word (GHS CN) Warning.

Hazard statements (GHS CN) H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (GHS CN)

Prevention measures P273 - Avoid release to the environment.

Incident response P391 - Collect spillage.

Disposal P501 - Dispose of contents/container to hazardous or

special waste collection point, in accordance with local, regional, national and/or international

regulation.

Physical and chemical hazards

No additional information available

Health hazards

No additional information available

Environmental hazards

Very toxic to aquatic life with long lasting effects

Other hazards

No additional information available

SECTION 3 Composition/information on ingredients

Product form Mixture.

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	Concentration or concentration ranges (w/w %)	CAS No.
zinc oxide	≤ 30	1 3 1 4 - 1 3 - 2

SECTION 4 First-aid measures

Description of necessary first-aid measures

First-aid measures after Remove person to fresh air and keep comfortable for

inhalation breathing.

First-aid measures after Wash skin with plenty of water

skin contact

First-aid measures after eye Rinse eyes with water as a precaution

contact

First-aid measures after Rinse mouth out with water.

ingestion Call a poison center or a doctor if you feel unwell

Most important symptoms/effects

No additional information available

Advices for first aid responders

No additional information available

Notes for the doctor

Other medical advice or

treatment

Treat symptomatically

SECTION 5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding

fire

Water spray Dry powder

 $F \circ a \; m$

Carbon dioxide

Unsuitable extinguishing No additional information available

media

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Specific hazards

Hazardous decomposition products in case of fire Toxic fumes may be released

On burning: release of harmful/irritant gases/vapours (When a package contains a combination of lithium batteries contained in equipment and lithium batteries packed with equipment, the following requirements apply for the purposes of package marking and documentation:

(a) the package shall be marked "UN 3091" or "UN 3481", as appropriate. If a package contains both lithium ion batteries and lithium metal batteries packed with and contained in equipment, the package shall be marked as required for both battery types. However, button cell batteries installed in equipment (including circuit boards) need not be considered; (b) the transport document shall indicate "UN 3091 LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT" or $3\,4\,8\,1$ LITHIUM ION BATTERIES PACKED WITH EQUIPMENT", as appropriate. If a package contains both lithium metal batteries and lithium ion batteries packed with and contained in equipment, then the transport document shall indicate both "UN 3091 LITHIUM METAL BATTERIES PACKED WITH EQUIPMENT" and "UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT". Zinc oxide)

Advice for firefighters and protective measures

Firefighting instructions

Protection during

firefighting

Other information

No additional information available

Do not attempt to take action without suitable

protective equipment

Self-contained breathing apparatus

Complete protective clothing

Collect contaminated extinguishing water separately

and must not enter the sewage system

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures

Personal Precautions, Protective Equipment and Emergency Procedures

No additional information available

No additional information available

For non-emergency personnel

Emergency procedures

Ventilate spillage area

For emergency responders

Protective equipment

Do not attempt to take action without suitable

protective equipment

For further information refer to section 8: "Exposure controls/personal protection'

Environmental precautions

Avoid release to the environment

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Methods and material for containment and cleaning up

Methods for cleaning No additional information available

For containment Collect spillage.

Prevention measures for secondary accidents

Prevention Measures for

Secondary Accidents

No additional information available

Other information Dispose of materials or solid residues at an

authorized site

SECTION 7 Handling and storage

Handling

Precautions for safe

handling

Hygiene measures

Local and general

ventilation

Ensure good ventilation of the work station

Wear personal protective equipment

Do not eat, drink or smoke when using this product.

Always wash hands after handling the product

No additional information available

Storage

Storage conditions

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

Keep cool.

No additional information available

Material used in packaging/containers

SECTION 8 Exposure controls / Personal protection equipment

Occupational exposure limits

zinc oxide (1314-13-2)		
China - Occupational Exposure Limits		
Local name	氧化锌 # Zinc oxide	
OEL PC-TWA	3 mg/m^3	
OEL PC-STEL	5 mg/m ³	
Regulatory reference	GBZ 2.1-2019	

Biological limit values

No additional information available

Monitoring methods

No additional information available

Appropriate engineering controls

Ensure good ventilation of the work station

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Personal protective equipment

Environmental exposure Avoid release to the environment.

controls

Hand protection In case of repeated or prolonged contact wear gloves

Nitrile rubber

Eye protection Safety glasses

Skin and body protection Wear suitable protective clothing

Respiratory protection In case of insufficient ventilation, wear suitable

respiratory equipment

Personal protective equipment symbol(s)







SECTION 9 Physical and chemical properties

Physical state Liquid

Appearance No data available

white Colour

0 dour characteristic No data available рΗ Melting point Not applicable

Freezing point No data available Boiling point No data available

Flash point > 260 ° C

Auto-ignition temperature Non oxidizing No data available Decomposition temperature Non flammable. Flammability

Vapour pressure No data available No data available

Relative vapour density at

20° C

Density 1.39 g/cm^3

Solubility No data available Partition coefficient n-No data available

octanol/water (Log Pow) Lower explosion limit No data available Upper explosion limit No data available

Radioactive

Particle size Not available

SECTION 10 Stability and reactivity

Chemical stability Stable under normal conditions

Reactivity The product is non-reactive under normal conditions of

use, storage and transport

Possibility of hazardous No dangerous reactions known under normal conditions reactions

of use

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Conditions to avoid None under recommended storage and handling conditions

(see section 7)

Incompatible materials No additional information available

Hazardous decomposition Under normal conditions of storage and use, hazardous

decomposition products should not be produced

No additional information available

SECTION 11 Toxicological information

Acute toxicity

Other properties

products

Acute toxicity (oral) No data available (Based on available data, the

classification criteria are not met)

Acute toxicity (dermal) No data available (Based on available data, the

classification criteria are not met)

Acute toxicity (inhalation) No data available (Based on available data, the

classification criteria are not met)

zinc oxide (1314-13-2)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat	> 5.7 mg/1/4h (OECD 403 method)

Skin corrosion/irritation

Skin corrosion/irritation No data available (Based on available data, the

classification criteria are not met)

Serious eye damage/eye irritation

Serious eye No data available (Based on available data, the

damage/irritation classification criteria are not met)

Respiratory or skin sensitisation

Respiratory or skin No data available (Based on available data, the

sensitisation classification criteria are not met)

Germ cell mutagenicity

Germ cell mutagenicity No data available (Based on available data, the

 $\hbox{\tt classification criteria are not met)}\\$

Carcinogenicity

Carcinogenicity No data available (Based on available data, the

classification criteria are not met)

Reproductive toxicity

Reproductive toxicity No data available (Based on available data, the

classification criteria are not met)

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STOT	_	single	exposure
0101		SIMETE	CVDOSITE

STOT - single exposure No data available (Based on available data, the

classification criteria are not met)

STOT - repeated exposure

No data available (Based on available data, the STOT - repeated exposure

classification criteria are not met)

Aspiration hazard

Aspiration hazard No data available (Based on available data, the

classification criteria are not met)

Gre. Gleitmittel DX

Density 1.39 g/cm^3

SECTION 12 Ecological information

Ecotoxicity

Ecology - general Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic Very toxic to aquatic life.

environment, short - term (acute)

Hazardous to the aquatic

environment, long-term (chronic)

Very toxic to aquatic life with long lasting effects.

zinc oxide (1314-13-2)	
LC50 - Fish [1]	1.55 mg/l (96 h; Danio rerio)
EC50 - Crustacea [1]	1 mg/l (48 h; Daphnia magna; (OECD 202 method))
EC50 72h - Algae [1]	0.136 mg/l (72 h; Pseudokirchneriella subcapitata; (OECD 201 method))
NOEC chronic fish	0.039 mg/l (30 d; Oncorhynchus mykiss; (OECD 215 method); Read-across)
NOEC chronic crustacea	0.04 mg/l (21 d; Daphnia magna; (OECD 211 method); Read-across)
NOEC chronic algae	0.01 mg/l (4 d; Dunaliella tertiolecta; IRSA-CNR; Read-across)

Persistence and degradability

zinc oxide (1314-13-2)	
Persistence and degradability	Not applicable

Bioaccumulative potential

zinc oxide (1314-13-2)	
Bioaccumulative potential	Not applicable

Mobility in soil

zinc oxide (1314-13-2)	
Bioaccumulative potential	Not applicable

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Other adverse effects

Classification procedure No data available (Based on available data, the

(0zone)classification criteria are not met)

Results of PBT and vPvB assessment

PBT This substance/mixture does not meet the PBT criteria

of REACH regulation, annex XIII

v P v B This substance/mixture does not meet the vPvB criteria

of REACH regulation, annex XIII

SECTION 13 Disposal considerations

Waste treatment methods Dispose of contents/container in accordance with

licensed collector's sorting instructions.

Contaminated container and No additional information available

packaging

Additional information No additional information available

Product/Packaging disposal

recommendations

Must not be disposed together with household garbage

Do not discharge into drains

Dispose in a safe manner in accordance with

local/national regulations

Refer to manufacturer/supplier for information on

recovery/recycling

Ecological waste information Avoid release to the environment.

SECTION 14 Transport information

In accordance with JT/T 617 / IMDG / IATA

Overland transport (JT/T 617)	Transport by sea	Air transport
UN number		
3082	3082	3 0 8 2
Proper shipping name		
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide)	Environmentally hazardous substance, liquid, n.o.s. (zinc oxide)
Transport document descripti	o n	
UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide), Class 9, PG III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc oxide), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (zinc oxide), 9, III
Transport hazard class(es)	1	1
9	9	9

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Overland transport (JT/T 617)	Transport by sea	Air transport
**************************************	2 2	**************************************
Packing group		
III.	III.	III.
Environmental hazards		
Dangerous for the environment Yes	Dangerous for the environment Yes Marine pollutant Yes	Dangerous for the environment Yes
Environmentally hazardous sub	stances derogation applies (q	l uantity of liquids ≤ 5

Environmentally hazardous substances derogation applies (quantity of liquids $\leqslant 5$ litres or net mass of solids $\leqslant 5$ kg), The environmentally hazardous substances mark is therefore not required according to ADR Special Provision 375, IATA-DGR A197 and IMDG-Code 2.10.2.7.

Special transport precautions

Overland transport (JT/T 617)	
Classification code (JT/T 617)	М 6.
Special provisions (JT/T 617)	274, 335, 375, 601.
Limited quantities (JT/T 617)	5 L .
Excepted quantities (JT/T 617)	E1.
Packing instructions (JT/T 617)	P001, IBC03, LP01, R001.
Special packing provisions (JT/T 617)	PP1.
Mixed packing provisions (JT/T 617)	MP19.
Portable tank and bulk container instructions (JT/T 617)	T 4.
Portable tank and bulk container special provisions (JT/T 617)	TP1, TP29.
Tank codes (JT/T 617)	LGBV.
Vehicle for tank carriage (JT/T 617)	A T .
Transport category (JT/T 617)	3.
Tunnel restriction code (JT/T 617)	Ε.
Special provisions for carriage - Packages (JT/T 617)	V 1 2.

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Special provisions for
                                   CV13.
  carriage - Loading,
  unloading and handling (JT/T
                                   90.
  Hazard identification number
  (JT/T 617)
  Orange-coloured plate (JT/T
                                       90
  617)
                                      3082
Transport by sea
  Special provisions (IMDG)
                                   274, 335, 375, 969.
  Limited quantities (IMDG)
                                   5 L.
  Excepted quantities (IMDG)
                                   Е1.
  Packing instructions (IMDG)
                                   LP01, P001.
  Special packing provisions
                                   PP1.
  (IMDG)
  IBC packing instructions
                                   IBC03.
  (IMDG)
  Tank instructions (IMDG)
  Tank special provisions
                                   TP1, TP29.
  (IMDG)
  EmS-No. (Fire)
                                   F - A.
  EmS-No. (Spillage)
                                   S-F.
  Stowage category (IMDG)
Air transport
  PCA Excepted quantities
                                   E1.
  (IATA)
  PCA Limited quantities
                                   Y964.
  (IATA)
  PCA limited quantity max net
                                   30kgG.
  quantity (IATA)
  PCA packing instructions
                                   964.
  (IATA)
  PCA max net quantity (IATA)
                                   450L.
  CAO packing instructions
                                   964.
  (IATA)
  CAO max net quantity (IATA)
                                   450L.
  Special provisions (IATA)
                                   A97, A158, A197, A215.
  ERG code (IATA)
                                   9 L.
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SECTION 15 Regulatory information

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New Chemical Substance Environmental Management Registration Measures (MEE Order 12 of 2020)

Inventory of Existing Chemical Contains listed substance(s)

Substances in China (IECSC) Zinc oxide (CAS-No. 1314-13-2)
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Regulations on the Safe Management of Hazardous Chemicals (Decree 591 of the State Council)

Contains Hazardous Chemical(s)

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Catalogue of Hazardous zinc oxid

Chemicals (2015) Considered as Hazardous Chemical(s)

Law of the People's Republic of China on the Prevention and Control of Occupational

Diseases

Occupational Diseases

Regulation on the Administration of Precursor Chemicals (Decree 445 of the State Council)

Catalogue of Precursor Chemicals

SECTION 16 Other information

Data sources Supplier's safety documents

European Chemicals Agency, http://echa.europa.eu/

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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