

Gre. Gleitmittel DX

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 11/24/2023

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Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Name	Gre. Gleitmittel DX
Product code	BU Direct Fastening

1.2. Recommended use and restrictions on use

Use of the substance/mixture	Ceramic Paste
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1.3. Supplier

Supplier

Hilti, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
Plano, TX 75024
USA
T +1 9724035800
1-800-879-8000 toll free - F +1 918 254 0522

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100
Schaan, 9494
Liechtenstein
T +423 234 2111
df-hse@hilti.com

1.4. Emergency telephone number

Emergency number	Emergency CONTACT (24-Hour-Number) GBK/Infotrac ID 101022 (USA domestic) 1 800 535 5053 or international (001) 352 323 3500
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SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Product identifier	%	GHS-US classification
zinc oxide	CAS-No.: 1314-13-2	≤ 30	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash skin with plenty of water.
First-aid measures after eye contact	Rinse eyes with water as a precaution.
First-aid measures after ingestion	Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	Toxic fumes may be released. On burning: release of harmful/irritant gases/vapours (zinc oxide).
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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	Collect contaminated extinguishing water separately and must not enter the sewage system.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	Ventilate spillage area.
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6.1.2. 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".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	Collect spillage.
Methods for cleaning up	Take up liquid spill into absorbent material.
Other information	Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling
Hygiene measures

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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available	
zinc oxide (1314-13-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Zinc oxide
ACGIH OEL TWA	2 mg/m ³ (R - Respirable particulate matter)
ACGIH OEL STEL	10 mg/m ³ (R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Metal fume fever
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Zinc oxide
OSHA PEL TWA [1]	5 mg/m ³ (Fume) 15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls
Environmental exposure controls

Ensure good ventilation of the work station.
Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
In case of repeated or prolonged contact wear gloves. Nitrile rubber
Eye protection:
Safety glasses

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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

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	white
Odour	characteristic
Odour threshold	No data available
pH	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	> 260 °C
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not applicable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.39 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	Non oxidizing
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	Not classified (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 (Dust/Mist)	> 5.7 mg/l/4h (OECD 403 method)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified
Viscosity, kinematic	(Based on available data, the classification criteria are not met) No data available

SECTION 12: Ecological information

12.1. Toxicity

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)

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12.2. Persistence and degradability

zinc oxide (1314-13-2)

Persistence and degradability	Not applicable.
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12.3. Bioaccumulative potential

zinc oxide (1314-13-2)

Bioaccumulative potential	Not applicable.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Should not be landfilled with household waste. Do not discharge into the sewer. Dispose in a safe manner in accordance with local/national regulations. Refer to manufacturer/supplier for information on recovery/recycling.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III
14.3. Transport hazard class(es)				
9	9	9	9	9

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ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 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.				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	M6
Special provisions (ADR)	274, 335, 375, 601
Limited quantities (ADR)	5I
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P001, IBC03, LP01, R001
Special packing provisions (ADR)	PP1
Mixed packing provisions (ADR)	MP19
Portable tank and bulk container instructions (ADR)	T4
Portable tank and bulk container special provisions (ADR)	TP1, TP29
Tank code (ADR)	LGBV
Vehicle for tank carriage	AT
Transport category (ADR)	3
Special provisions for carriage - Packages (ADR)	V12
Special provisions for carriage - Loading, unloading and handling (ADR)	CV13
Hazard identification number (Kemler No.)	90
Orange plates	90 3082

Tunnel restriction code (ADR)

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Transport by sea

Special provisions (IMDG)	274, 335, 969
Limited quantities (IMDG)	5 L
Excepted quantities (IMDG)	E1
Packing instructions (IMDG)	LP01, P001
Special packing provisions (IMDG)	PP1
IBC packing instructions (IMDG)	IBC03
Tank instructions (IMDG)	T4
Tank special provisions (IMDG)	TP1, TP29
EmS-No. (Fire)	F-A

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EmS-No. (Spillage)	S-F
Stowage category (IMDG)	A
Air transport	
PCA Excepted quantities (IATA)	E1
PCA Limited quantities (IATA)	Y964
PCA limited quantity max net quantity (IATA)	30kgG
PCA packing instructions (IATA)	964
PCA max net quantity (IATA)	450L
CAO packing instructions (IATA)	964
CAO max net quantity (IATA)	450L
Special provisions (IATA)	A97, A158, A197, A215
ERG code (IATA)	9L
Inland waterway transport	
Classification code (ADN)	M6
Special provisions (ADN)	274, 335, 375, 601
Limited quantities (ADN)	5 L
Excepted quantities (ADN)	E1
Carriage permitted (ADN)	T
Equipment required (ADN)	PP
Number of blue cones/lights (ADN)	0
Rail transport	
Classification code (RID)	M6
Special provisions (RID)	274, 335, 375, 601
Limited quantities (RID)	5L
Excepted quantities (RID)	E1
Packing instructions (RID)	P001, IBC03, LP01, R001
Special packing provisions (RID)	PP1
Mixed packing provisions (RID)	MP19
Portable tank and bulk container instructions (RID)	T4
Portable tank and bulk container special provisions (RID)	TP1, TP29
Tank codes for RID tanks (RID)	LGBV
Transport category (RID)	3
Special provisions for carriage – Packages (RID)	W12
Special provisions for carriage - Loading, unloading and handling (RID)	CW13, CW31
Colis express (express parcels) (RID)	CE8
Hazard identification number (RID)	90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
zinc oxide	1314-13-2	Present	Active	

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15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

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Data sources Supplier's safety documents. European Chemicals Agency, <http://echa.europa.eu/>.

SDS US HILTI

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.