

Printing date 24.03.2025 Version: 4.01 (replaces version 4.00) Revision: 19.03.2025

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

1.1 Product identifier

Trade name:

GLOXIL matt

Nanoform:

This product contains nanoforms (according to UK REACH regulation (EC) 1907/2006).

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

Application of the substance / the mixture

As functional fillers for elastomers, plastics, paints and varnishes, adhesives, polishing and protective agents, welding electrodes, as well as in the construction and chemical industries.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

HOFFMANN MINERAL GmbH

Münchener Straße 75

D - 86633 Neuburg/Donau

Tel.: +49 (8431) 53-0

www.hoffmann-mineral.com

Further information obtainable from: info@hoffmann-mineral.com

1.4 Emergency telephone number:

+49 (0) 84 31 53-0

(Not available outside office hours!)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Sol. 2 H228 Flammable solid.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS02

Signal word Warning

Hazard statements

H228 Flammable solid.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P370+P378 In case of fire: Use for extinction: CO2, powder or foam.

Information concerning particular hazards for human and environment:

Occupational exposure to cryp. CS A-dust should be monitored and controlled. The product has absorbing action and repeated exposure may cause skin dryness.

2.3 Other hazards May form explosible dust-air mixture if dispersed.

Results of PBT and vPvB assessment

PBT:

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as PBT

vPvB:

According to information provided in the supply chain, the mix contains less than 0.1% of any substances classified as vPvB.

Determination of endocrine-disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to UK REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



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>50%

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: GLOXIL matt is based on Amorphous Silica and coated with various bonding agents.

Dangerous components:

CAS: 7631-86-9

Amorphous Silica

EINECS: 231-545-4 Substance with a Community workplace exposure limit.

Nanoform: set including amorphous nanoforms non-surface-treated nanoforms
Structure: amorphous forms
Crystallinity: amorphous nanoform.

Additional information:

<u>Bonding agents:</u>Unsaturated, even numbered, unbranched fatty acid ester mixtures. The exact chemical composition and concentration of the bonding agents is part of company know-how and, therefore, confidential.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: In any cases of doubt or if symptoms are present, seek medical advice.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash the areas of skin affected with water and a mild detergent.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Foam

Fire-extinguishing powder

Carbon dioxide

Water spray

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Flammable (Burning number [BZ]: 5) (VDI 2263)

Dust can combine with air to form an explosive mixture.

5.3 Advice for firefighters

Protective equipment:

Do not enter the hazardous area without a self-contained breathing apparatus.

See Section 8 for information on personal protection equipment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Ensure adequate ventilation

Use respiratory protective device against the effects of fumes/dust/aerosol.

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For non-emergency personnel

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from ignition sources.

For emergency responders Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

The following information refer to the leackage of large quantities:

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

6.3 Methods and material for containment and cleaning up:

Avoid dry sweeping and use water spraying or vacuum cleaning (minimum dust class L) for removal.

Keep in closed containers, ready for disposal.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

Provide suction extractors if dust is formed.

Ensure good ventilation. This can be achieved by localised extraction or general ventilation. If this is not sufficient to keep the concentration below the occupational exposure limit, suitable breathing protection is to be worn.

Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

Dust can combine with air to form an explosive mixture.

Use only in explosion protected area.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Observe local/state/federal regulations.

Further information about storage conditions:

Store in dry conditions.

Protect from heat and direct sunlight.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 7631-86-9 Amorphous Silica

W EL (Great Britain) Long-term value: 2.4 mg/m³

respirable aerosol

WEL (Great Britain) Long-term value: 6 mg/m³

inhalable aerosol

OEL (Ireland) Long-term value: 6 (1) mg/m³

Dust, respirable

General Exposure limit for dust

LV - IRELAND (Ireland) Long-term value: 4 mg/m3

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Dust. inhalable

General Exposure limit for dust

LV - IRELAND (Ireland) Long-term value: 10 mg/m³

Regulatory information

WEL (Great Britain): EH40/2020

OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work

DNELS

CAS: 7631-86-9 Amorphous Silica

Inhalative DNEL 4 mg/m³ (worker) (acute-local)

DNEL 4 mg/m³ (worker) (long-local)

Regulatory information

Additional Occupational Exposure Limit Values for possible hazards during processing:

Observe general threshold limit for dust.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Do not inhale dust / smoke / mist.

Immediately remove all soiled and contaminated clothing

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

If the occupational exposure limit is exceeded:

The following breathing protection is recommended:

fine-dust filter mask (FFP 2)

Hand protection No chemical-protective gloves required.

Eye/face protection Safety glasses with side shields

Body protection: Not required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical stateSolidColour:WhiteOdour:OdourlessMelting point/freezing point:Undetermined.

Boiling point or initial boiling point and boiling

range Not applicable.
Flammability Flammable solid.

Lower and upper explosion limit

Lower:60 g/m³Upper:Not determined.Flash point:Not applicable.Auto-ignition temperature:270 °CDecomposition temperature:Not determined.

pH (100 g/l) at 20 °C 6.0 - 8.5 (DIN EN ISO 787 / 9)

Viscosity:

Kinematic viscosity Not applicable

Solubility

water: practically insoluble.

Partition coefficient n-octanol/water (log value) Not determined Not applicable.

Density and/or relative density

Density at 20 °C: 1.3 g/cm³ (DIN EN ISO 787 / 10)

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Vapour density Not applicable

Particle characteristics d(50): 7-11 µm (ISO 13320)

Nanoform:

Amorphous nanoform, set including amorphous nanoforms, amorphous forms, surface-treated

nanoforms.

9.2 Other information

Appearance:

Form: Powder

Important information on protection of health and

environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

Change in condition Softening point/range

Oxidising propertiesNot determinedEvaporation rateNot applicable

Information with regard to physical hazard classes

ExplosivesVoidFlammable gasesVoidAerosolsVoidOxidising gasesVoidGases under pressureVoidFlammable liquidsVoid

Flammable solids Flammable solid.

Self-reactive substances and mixtures
Pyrophoric liquids
Pyrophoric solids
Void
Self-heating substances and mixtures
Void

Substances and mixtures, which emit flammable

gases in contact with water Void
Oxidising liquids Void
Oxidising solids Void
Organic peroxides Void
Corrosive to metals Void
Desensitised explosives Void

Additional information raised/whirled dust:

dust explosion class: 2 KSt (bar x m x s⁻¹) = 227

Minimum ignition energy: >1 / <3 mJ

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions Risk of dust explosion.

10.4 Conditions to avoid

Keep ignition sources away - Do not smoke. See Section 7 for information on safe handling.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

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ı	LD/LC50 values relevant for classification:					Ź
(CAS: 7631-86-9 Amorphous Silica			٦		
(Oral	LD50	>5,000 mg/kg (rat) (OECD 401)			٦
L	Dermal	LD50	>6,000 mg/kg (rabbit)			
1	Inhalative	LC0/4h	>140->2,000 mg/l (rat) (OECD 403)			

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

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

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

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

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

Additional toxicological information:

Repeated dose toxicity

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

Dasc	based on available data, the diagonication entend are not met.			
CAS	CAS: 7631-86-9 Amorphous Silica			
Oral	NOAE	EL 9,000 mg/kg (rat) (90d / OECD 408)		
Inhai	lative NOAE	EC 1 mg/m³ (rat) (90d / OECD 413)		
Values relevant for classification:				
	CAS: 7631-86-9 Amorphous Silica			
		1,350 mg/kg/day (rat) (OECD 414)		
	AMES test	>5 mg/plate (in-vitro) (OECD 471)		

11.2 Information on other hazards

Endocrine disrupting properties

According to the current state of scientific knowledge, there is no data for the product regarding endocrine disrupting properties with health effects.

SECTION 12: Ecological information

12.1 Toxicity There are no ecotoxicological data available on this mixture.

Aquatic toxicity:

No further relevant information available.

CAS: 7631-86-9 Amorphous Silica		
LC50 / 96h	10,000 mg/l (Danio rerio) (OECD 203)	
EC50 / 24h	>1,000 mg/l (Daphnia magna) (OECD 202)	
EC50 / 72h	>10,000 mg/l (Scenedesmus subspicatus) (OECD 201)	

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment

PBT:

According to information provided in the supply chain, the mix conatins less than 0.1% of any substances classified as PBT

vPvR.

According to information provided in the supply chain, the mix conatins less than 0.1% of any substances classified as vPvB

12.6 Endocrine disrupting properties

According to the current state of scientific knowledge, there is no data for the product regarding endocrine disrupting properties with effects on the environment.

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12.7 Other adverse effects No further relevant information available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation Disposal must be made according to official regulations.

Waste disposal key:

For this product no waste code are defined according to the European Waste Catalogue, as the intended use by the user enables an allocation.

The waste code must be defined in agreement with the regional waste disposers.

European waste catalogue

HP 3 Flammable

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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14.1 UN number or ID number ADR/RID/ADN, IMDG, IATA	UN3178
14.2 UN proper shipping name	
ADR/RID/ADN	3178 FLAMMABLE SOLID, INORGANIC, N.O.S. (Silica,
	Fettsäureester)
IMDG	FLAMMABLE SOLID, INORGANIC, N.O.S. (Silica, fatty acid
	esters)
IATA	FLAMMABLE SOLID, INORGANIC, N.O.S. (Silica,
	Fettsäureester)
	····· /

14.3 Transport hazard class(es)

ADR/RID/ADN



4.1 (F3) Flammable solids, self-reactive substances, Class

polymerizing substances and solid desensitized explosives

Label 4.1

IMDG, IATA



4.1 Flammable solids, self-reactive substances, polymerizing Class

substances and solid desensitized explosives 4.1

Label

14.4 Packing group Ш ADR/RID/ADN, IMDG, IATA

14.5 Environmental hazards: Marine pollutant:

14.6 Special precautions for user Warning: Flammable solids, self-reactive substances,

polymerizing substances and solid desensitized explosives

Hazard identification number (Kemler code): 40 Stowage Category

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Transport/Additional information:

ADR/RID/ADN

Limited quantities (LQ)5 kgTransport category3Tunnel restriction codeE

UN "Model Regulation": UN 3178 FLAMMABLE SOLID, INORGANIC, N.O.S. (SILICA,

FETTSÄUREESTER), 4.1, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Nothing additionally known beyond the information which are given in the sections 2., 8., 11., 12.

European Directives:

Directive 2010/75/EU (VOC) not subject to

Catégorie SEVESO (DIRECTIVE 2012/18/EU) not subject to

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Classification according to Regulation (EC) No 1272/2008

Flammable solids | On basis of test data

Date of previous version: 30.06.2023 **Version number of previous version:** 4.00

Abbreviations and acronyms:

NOEL = No Observed Effect Level

NOEC = No Observed Effect Concentration

LC = letal Concentration

EC50 = half maximal effective concentration

log POW = Octanol / water partition coefficient

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ATE: acute toxicity estimate

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IOELV = indicative occupational exposure limit values

Flam. Sol. 2: Flammable solids - Category 2

* Data compared to the previous version altered.

GB