

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 1 of 9
Print Date: 4-4-2024

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

1.1 Product Identification:

Product name: Zhermack silicone ZA 22 Thixo Body - part B

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

Identified applications: For professional / industrial use only. Addition silicone for making moulds.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a
2590 Berlaar
Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency Phone Number:

For Belgium:

NHS 24 Direct

Call the **Poison Control Centre (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery.
For urgent medical help, use the NHS 111 online service, or **call 111** if you are unable to get help online.
For life-threatening emergencies, call 999 for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2 Label elements:

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3 Other hazards:

There is no exposure to breathable free crystalline silica during normal use of this product. For more information see section 11.

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$

Other Hazards:

No other hazards

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 2 of 9
Print Date: 4-4-2024

SECTION 3: Composition and information on ingredients

3.2 Mixtures:

Hazardous components within the meaning of the CLP regulation and related classification:

Name	CAS-Nr. EINECS Nr. Index Number REACH Reg. Nr.	Classification	Quantity %
Quartz	14808-60-7 238-878-4 - -	STOT RE 2 H373	>= 10% - < 12,5%
octamethylcyclotetrasiloxane; [D4]	556-67-2 209-136-7 014-018-00-1 -	Flam. Liq. 3 H226 Repr. 2 H361f Aquatic Chronic 1 H410 M=10.	<0,09%

Full explanation of the H-phrases in Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None known.

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

None known.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

5.2 Special hazards arising from the substance or mixture:

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3 Advice for firefighters:

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately.

This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures for the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Wear personal protection equipment.

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 3 of 9
Print Date: 4-4-2024

Remove persons to safety.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2 Environmental precautions:

Do not allow to enter into soil/subsoil.

Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand.

6.3 Methods and material for containment and cleaning up:

Wash with plenty of water.

6.4 Reference to other sections:

See also section 8 and 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Do not eat or drink while working.

7.2 Conditions for safe storage, including any incompatibilities:

Keep away from food, drink and feed.

Incompatible materials:

See section 10.5.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3 Specific end use:

See Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

ZA 22 THIXO BODY - CATALYST

Quartz - CAS: 14808-60-7

OEL Type	TWA	Duration	STEL	Duration	Notes	Country
TLV	0.3 mg/m3	8h	0.6 mg/m3	15 min	Inhalable (aerosol)	DENMARK
TLV	0.1 mg/m3	8h	0.2 mg/m3	15 min	Respirable (aerosol)	DENMARK
OELV	0.1 mg/m3	8h			Respirable	IRELAND
VLA	0.05 mg/m3	8h			Respirable	SPAIN
MAK	0.15 mg/m3	8h			Respirable (aerosol)	SWITZERLAND
VLEP	0.1 mg/m3	8h				BELGIUM
VLEP	0.1 mg/m3	8h			Respirable (aerosol)	FRANCE
TGG	0.075 mg/m3	8h			Respirable dust	NETHERLANDS
NGV/KGV	0.1 mg/m3	8h			Respirable	SWEDEN
AK	0.15 mg/m3	8h			Respirable (aerosol)	HUNGARY
HTP	0.05 mg/m3	8h			Respirable	FINLAND
MAK	0.15 mg/m3	8h			Respirable (aerosol)	AUSTRIA
NIOSH	0.05 mg/m3	8h				UNITED STATES
NDS/NDSch	0.1 mg/m3	8h			Respirable	POLAND
ACGIH	0.025 mg/m3	8h			(R), A2 - Pulm fibrosis, lung cancer	

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

OEL Type	TWA	Duration	STEL	Duration	Notes	Country
No data available						

DNEL Exposure Limit Values

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 4 of 9
Print Date: 4-4-2024

Not available

PNEC Exposure Limit Values

Not available

8.2 Exposure controls:

Precautionary measures:

Give adequate ventilation to the premises where the product is stored and/or handled.

Eye protection:

Wear airtight protective goggles (EN 166).

Protection for skin:

Wear professional overalls and safety footwear (EN 14605).

Protection for hands:

Protect hands with work gloves (EN 374).

The following should be considered when choosing work glove material (EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable.

The gloves' wear time depends on the duration and type of use.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered (e.g. TLV-TWA).

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Paste
Colour:	White
Odour:	Odourless
Melting point/freezing point:	Not available
Boiling point or initial boiling point and boiling range:	Not available
Flammability:	Not available
Lower and upper explosion limit:	Not available
Flash point:	>130°C
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	Not Relevant
Kinematic viscosity:	Not available
Solubility in water:	Insoluble
Solubility in oil:	Not available
Partition coefficient n-octanol/water (log value):	Not available
Vapour pressure:	Not available
Density and/or relative density:	Not available
Relative vapour density:	Not available

Particle characteristics:

Particle size:	Not available
----------------	---------------

9.2 Other information

Viscosity:	Not available
------------	---------------

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 5 of 9
Print Date: 4-4-2024

SECTION 10: Stability and reactivity

10.1 Reactivity:

Stable under normal conditions.

10.2 Chemical Stability:

Stable under normal conditions.

10.3 Potential Hazardous Reactions:

None known.

10.4 Conditions to Avoid:

Stable under normal conditions.

10.5 Chemically Interacting Materials:

None in particular.

10.6 Hazardous Decomposition Products:

None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

"For the purposes of classification of health hazards (part 3), the route of exposure, information on mechanisms and metabolism studies are useful for determining the relevance of effects in humans. If this information raises doubts as to their relevance in humans, in spite of the indisputable data legitimacy and quality, a lower classification may be justified. When there is scientific evidence that the mechanism or mode of action is not relevant to humans, the substance or mixture should not be classified" (annex I, section 1.1.1.5, EC Regulation 1272/2008).

Monitoring activities conducted at the company related to possible inhalation exposure, in accordance with industrial hygiene standards for paste and fluid products, showed levels of exposure to free crystalline silica (breathable part) below the limit of quantification of the method, therefore exposure is not expected during the use indicated in section 1.2 for this specific product.

However, the actual levels of free crystalline silica (breathable part) present in the workplace must be obtained through monitoring as required by regulations for the safety and health of workers.

Toxicological information of the product:

ZA 22 THIXO BODY - CATALYST

a) acute toxicity

Not classified

b) skin corrosion/irritation

Not classified

c) serious eye damage/irritation

Not classified

d) respiratory or skin sensitisation

Not classified

e) germ cell mutagenicity

Not classified

f) carcinogenicity

Not classified

g) reproductive toxicity

Not classified

h) STOT-single exposure

Not classified

i) STOT-repeated exposure

Not classified

j) aspiration hazard

Not classified

Toxicological information of the main substances found in the product:

Quartz - CAS: 14808-60-7

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 6 of 9
Print Date: 4-4-2024

i) STOT-repeated exposure:

Route: Inhalation - Notes: Target organ: lungs - Positive - Source: (MSDS supplier).
octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

a) acute toxicity:

Test: LC50 - Species: Rat 36 mg/l - Source: (OECD 403, GLP, rat, 4 h, ECHA dossier).

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: (similar to OECD 402, rat, ECHA dossier).

Test: LD50 - Route: Oral - Species: Rat 4800 mg/kg - Source: (similar to OECD 401, rat, ECHA dossier).

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

The product is not classified for chronic aquatic hazard: a test based on the bioavailability / release of D4 by the polymer silicone was performed with the OECD 29 method. It was found that the quantity of D4 released by 100mg of polymer is at least below the quantification limit of the method (i.e. 4.4 ppb), a value significantly lower than the limit that would result in the classification for chronic aquatic toxicity, i.e. NOEC of 0.0044 mg / L for fish and 0.0079 mg / L for aquatic invertebrates. Therefore, the product is not classified for this hazard class.

12.1 Toxicity:

Adopt good working practices, so that the product is not released into the environment.

ZA 22 THIXO BODY - CATALYST

The product is classified: -

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

a) Aquatic acute toxicity:

Endpoint: IC50 - Species: Algae > 0.0022 mg/l - Duration h: 72h (EPA OTS 797.1050, Selenastrum capricornutum, freshwater, ECHA dossier).

Endpoint: LC50 - Species: Fish > 0.0022 mg/l (Oncorhynchus mykiss, GLP, ECHA dossier).

Endpoint: NOEC - Species: Fish > 0.0044 mg/l (publication, Oncorhynchus mykiss, GLP, ECHA dossier).

Long-term toxicity to aquatic invertebrates:

Endpoint: NOEC - Species: Daphnia = 7.9 $\mu\text{g/L}$ - Duration h: 21d EPA OTS 797.1330, Daphnia magna, ECHA dossier

12.2 Persistence and Degradability:

Quartz - CAS: 14808-60-7

Biodegradability: Non-readily biodegradable

12.3 Bioaccumulation:

Quartz - CAS: 14808-60-7

Not bioaccumulative

octamethylcyclotetrasiloxane; [D4] - CAS: 556-67-2

Test: Kow - Partition coefficient 6.49 - Notes: (Log Pow, ECHA dossier).

12.4 Mobility in Soil:

Information not available.

12.5 Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None.

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.7. Other adverse effects

None known.

SECTION 13: Instructions for disposal

13.1 Waste treatment methods:

Recover if possible.

In so doing, comply with the local and national regulations currently in force.

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 7 of 9
Print Date: 4-4-2024

SECTION 14: Information relating to carriage

14.1 UN number

The transport of this substance is not subject to regulations.

14.2 Proper load name according to UN Model Regulations

The transport of this substance is not subject to regulations.

14.3 Transport hazard class(es)

The transport of this substance is not subject to regulations.

14.4 Packing group

The transport of this substance is not subject to regulations.

14.5 Environmental hazards

The transport of this substance is not subject to regulations.

14.6 Special precautions for the user

The transport of this substance is not subject to regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Notes: Not applicable for product, as supplied.

SECTION 15: Legally required information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2020/878

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

Restriction 70

Restriction 75

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: E2

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 8 of 9
Print Date: 4-4-2024

Lagerklasse according to TRGS 510:

LGK 10: Combustible liquids

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

California Proposition 65

Substance(s) listed under California Proposition 65:

Quartz - Listed as carcinogen.

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Repr. 2	3.7/2	Reproductive toxicity, Category 2
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

This safety data sheet has been completely updated in compliance to Regulation 2020/878.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aquatic Chronic	According to Article 12 of the CLP Regulation, "Where, as a result of the evaluation carried out pursuant to Article 9, the following properties or effects are identified, manufacturers, importers and downstream users shall take them into account for the purposes of classification: [...] (b) conclusive scientific experimental data show that the substance or mixture is not biologically available and those data have been ascertained to be adequate and reliable." Following a release study of D4 through the OECD 29 test on polymeric products representative for quantity of D4, the limit that would result in the classification for chronic aquatic toxicity (NOEC of 0.0044 mg / L for fish and 0.0079 mg / L for invertebrates aquatic) is not reached.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECHA – European Chemical Agency

GESTIS - Information system on hazardous substances of the German Social Accident Insurance

IARC – International Agency for Research on Cancer

IPCS INCHEM – International Programme on Chemical Safety

ISS – Istituto Superiore di Sanità

PubChem - open chemistry database at the National Institutes of Health (NIH)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate

SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878
Version 5.0 Revision Date: 05-12-2022
Trade name: Zhermack Silicone ZA 22 Thixo Body - Part B

Page 9 of 9
Print Date: 4-4-2024

ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.