

# Revision nr. 4 Dated 19/01/2023

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

1.1. Product identifier

Mixture identification: Product Name: Code:

ELITE HD+ REGULAR BODY NORMAL SET - BASE C203020, C203025, C203100

#### **1.2. Relevant identified uses of the substance or mixture and uses advised against** For professional use only. Addition silicone for dental impression.

#### 1.3. Details of the supplier of the safety data sheet

Name Zhermack S.p.a Via Bovazecchino 100 45021 Badia Polesine (RO) Italy tel. +39 0425-597611 fax +39 0425-597689

Competent person responsible for the safety data sheet:

msds@zhermack.com

**1.4. Emergency telephone number** 

+39 0425 597611 (office hours)

### SECTION 2: Hazards 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 Regulation EC 1272/2008, on classification, labelling and packaging of substances and mixtures (CLP), shall not apply to a medical device in the finished state used in direct physical contact with the human body according to art. 1.5, letter d). Therefore the product is exempted from the CLP labeling requirements.

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.

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No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

#### 3.2. Mixtures

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

Qty	Name	Ident. Number		Classification
>= 30% - < 40%	Quartz	CAS: EC:	14808-60-7 238-878-4	STOT RE 1 H372 Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.
>= 3% - < 5%	Cristobalite	CAS: EC:	14464-46-1 238-455-4	STOT RE 1 H372 Causes damage to organs (lungs) through prolonged or repeated exposure if inhaled.

Substances in nanoform:

>= 5% - < 8% Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica - Nanoform

CAS: 68909-20-6, EC: 272-697-1

>= 0,5% - < 2,5% Pyrogenic Silica - Nanoform REACH No.: 01-2119379499-16-XXXX, CAS: 112945-52-5

>= 0,1% - < 0,3% 2-(3,6-dihydroxy-2,4,5,7-tetraiodoxanthen-9- yl)benzoic acid, aluminium salt - Nanoform CAS: 12227-78-0, EC: 235-440-4

<0,1% 29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper - Nanoform CAS: 147-14-8, EC: 205-685-1

### 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
- **4.3. Indication of any immediate medical attention and special treatment needed** Treatment:
  - None

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### 5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons: 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

### 6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

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(s)

See section 1.2.

### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

ELITE HD+ REGULAR BODY NORMAL SET - BASE Quartz - CAS: 14808-60-7

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
MAK	0.15	8h			Respirable	AUSTRIA



	mg/m3				(aerosol)	
TLV	0.1	8h	0.2	15min	Respirable	DENMARK
	mg/m3		mg/m3		(aerosol)	
HTP	0.05	8h			Respirable	FINLAND
	mg/m3					
AK	0.15	8h			Respirable	HUNGARY
	mg/m3				(aerosol)	
OELV	0.1	8h			Respirable	IRELAND
	mg/m3					
TGG	0.075	8h			Respirable	NETHERLAN
	mg/m3					DS
NGV/KGV	0.1	8h			Respirable	SWEDEN
	mg/m3					
VLA	0.1	8h			Respirable	SPAIN
	mg/m3					
MAK	0.15	8h			Respirable	SWITZERLA
	mg/m3				(aerosol)	ND
VLEP	0.1	8h				BELGIUM
	mg/m3					
VLEP	0.1	8h			Respirable	FRANCE
	mg/m3				(aerosol)	
TLV-ACGIH	0.025	8h				
	mg/m3					
TLV	0.3	8h	0.6	15min	Inhalable	DENMARK
	mg/m3		mg/m3		(aerosol)	
NIOSH	0.05	8h				UNITED
	mg/m3					STATES
ACGIH	0.025	8h			(R), A2 -	
	mg/m3				Pulm	
					fibrosis,	
					lung	
					cancer	

Cristobalite - CAS: 14464-46-1

OEL Type	TWA	Duratio	STEL	Duratio	Notes	Country
		n		n		
EU	0.1 mg/m3	8h			Respirable	
TLV	0.1 mg/m3	8h			Respirable	ITALY
ACGIH	0.025 mg/m3	8h			(R), A2 - Pulm fibrosis, lung cancer	

**DNEL Exposure Limit Values** 

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:

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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**

Properties	Value	Method:	Notes			
Physical state:	Viscous fluid					
Colour:	Violet					
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:	Not available					
Auto-ignition temperature:	Not available					
Decomposition temperature:	Not available					
pH:	Not available					
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					

### 9.1. Information on basic physical and chemical properties

### 9.2. Other information

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No other relevant information

#### SECTION 10: Stability and reactivity

- 10.1. Reactivity Stable under normal conditions
- **10.2. Chemical stability** Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- **10.4. Conditions to avoid** Stable under normal conditions.
- **10.5. Incompatible materials** None in particular.
- **10.6. Hazardous decomposition products** None.

### **SECTION 11: Toxicological information**

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

"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:

ELITE HD+ REGULAR BODY NORMAL SET - BASE 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

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#### 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
- i) STOT-repeated exposure:

Route: Inhalation - Notes: Target organ: lungs - Positive - Source: (MSDS supplier). Cristobalite - CAS: 14464-46-1

i) STOT-repeated exposure:

Route: Inhalation - Notes: Silicosis, pulmonary fibrosis; Target organ: lungs - Source: (MSDS supplier).

# 11.2. Information on other hazards

Endocrine disrupting properties: No endocrine disruptor substances present in concentration >= 0.1%

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. ELITE HD+ REGULAR BODY NORMAL SET - BASE Not classified for environmental hazards Based on available data, the classification criteria are not met 12.2. Persistence and degradability Quartz - CAS: 14808-60-7 Biodegradability: Non-readily biodegradable Cristobalite - CAS: 14464-46-1 Biodegradability: Non-readily biodegradable 12.3. Bioaccumulative potential Quartz - CAS: 14808-60-7 Not bioaccumulative Cristobalite - CAS: 14464-46-1 Not bioaccumulative 12.4. Mobility in soil 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 >= 0.1%

### 12.7. Other adverse effects

None

# SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

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

### **SECTION 14: Transport information**

### 14.1. UN number or ID number

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Not classified as dangerous in the meaning of transport regulations.

- 14.2. UN proper shipping name
  - Not available
- 14.3. Transport hazard class(es) Not available
- 14.4. Packing group
  - Not available
- 14.5. Environmental hazards ADR-Enviromental Pollutant: No No
- IMDG-Marine pollutant: 14.6. Special precautions for user

Not available

14.7. Maritime transport in bulk according to IMO instruments Not Applicable

# SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/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 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 None

WGK Classification (Water hazard class - Verwaltungsvorschrift wassergefährdende Stoffe)

Lagerklasse according to TRGS 510: LGK 10: Combustible liquids

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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 Cristobalite - 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
STOT RE 1	3.9/1	Specific target organ toxicity - repeated exposure, Category 1

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)

A safety data sheet is not required for this product under article 31 of Regulation 1907/2006/EC. This safety data sheet has been created on a voluntary basis.

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
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"

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(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.