C302205, C302205., C302230 - NEOCOLLOID

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Safety Data Sheet

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

1.1. Product identifier

Code: C302205, C302205., C302230

Product name NEOCOLLOID

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

Intended use For professional use only. Alginate for dental impression.

1.3. Details of the supplier of the safety data sheet

Name Zhermack S.p.a
Full address Via Bovazecchino 100
District and Country 45021 Badia Polesine (RO)

Italy

Tel. +39 0425-597611 Fax +39 0425-597689

e-mail address of the competent person

responsible for the Safety Data Sheet msds@zhermack.com

1.4. Emergency telephone number

For urgent inquiries refer to 0039 0425597611

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2015/830.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Specific target organ toxicity - repeated exposure, category 2 H373 May cause damage to organs through prolonged or repeated

exposure.

Izardous to the aquatic environment, chronic toxicity H412 Harmful to

Hazardous to the aquatic environment, chronic toxicity, H412 Harmful to aquatic life with long lasting effects. category 3

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.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

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Hazard pictograms:



Signal words: Warning

Hazard statements:

H373 May cause damage to lungs through prolonged or repeated exposure. Route of exposure: inhalation.

H412 Harmful to aquatic life with long lasting effects.

EUH208 Contains: D-CARVONE. May produce an allergic reaction.

Precautionary statements:

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing

P273 Avoid release to the environment.

P260 Do not breathe dust.

P314 Get medical advice / attention if you feel unwell.

Contains: CRISTOBALITE

2.3. Other hazards

Classification of the mixture is based on the results of an in vitro assay conducted in accordance with the guidelines provided by OCSE (OECD Test Guideline 437 resp. EU Method B.47 – Bovine Corneal Opacity and Permeability (BCOP) Test Method) and GLP certified - Good Laboratory Practices. For more information refer to section 11.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification x = Conc. % Classification 1272/2008 (CLP)

CRISTOBALITE

CAS 14464-46-1 1 ≤ x < 8 STOT RE 1 H372

EC 238-455-4

INDEX -

DIPOTASSIUM HEXAFLUOTOTITANATE

CAS 16919-27-0 1 ≤ x < 3 Acute Tox. 4 H302, Eye Dam. 1 H318

EC 240-969-9

INDEX -

Reg. no. 01-2119978268-20-XXXX

ZINC OXIDE

CAS 1314-13-2 0,5 ≤ x < 2,5 Aquatic Acute 1 H400 M=1, Aquatic Chronic 1

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EC 215-222-5

INDEX 030-013-00-7

Reg. no. 01-2119463881-32-XXXX

VASELIN OIL

CAS 8042-47-5

 $1 \le x < 3$

Asp. Tox. 1 H304

H410 M=1

EC 232-455-8

INDEX -

Reg. no. 01-2119487078-27-XXXX

SODIUM PYROPHOSPHATE

CAS 7722-88-5 1≤x<3

Acute Tox. 4 H302, Eye Dam. 1 H318

EC 231-767-1

INDEX -

Reg. no. 01-2119489794-17-XXXX

D-CARVONE

CAS 2244-16-8 0 ≤ x < 0,2 Skin Sens. 1B H317

EC 218-827-2

INDEX 606-148-00-8

Reg. no. 01-2120762154-58-XXXX

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately. INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product and place it in containers for recovery or disposal. If there are no contraindications, use jets of water to eliminate product residues.

Make sure the leakage site is well aired. Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

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7.3. Specific end use(s)

See section 1.2.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА
	·	ЗДРАВЕОПАЗВАНЕТО НАРЕДБА № 13 от 30 декември 2003 г (4 Септември 2018г)
CZE	Česká Republika	Nařízení vlády č. 246/2018 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se
	·	stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	TRGS 900 (Fassung 07.06.2018) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Bekendtgørelse om ændring af bekendtgørelse om grænseværdier for stoffer og materialer1- BEK nr 655 af 31/05/2018
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2008 NIPO: 211- 08-011-5
FIN	Suomi	HTP-VÄRDEN 2018. Koncentrationer som befunnits skadliga. SOCIAL- OCH
		HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 10/2018
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition published 2018)
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
HRV	Hrvatska	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti
		i biološkim graničnim vrijednostima (NN 91/18)
HUN	Magyarország	A pénzügyminiszter 7/2018. (VIII. 29.) PM rendelete a munkahelyek kémiai biztonságáról szóló 25/2000. (IX. 30.) EüM–
		SZCSM együttes rendelet módosításáról
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
ROU	România	HOTĂRÂRE nr. 584 din 2 august 2018 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind
		stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor
		împotriva riscurilor legate de prezenta agentilor chimici
SVK	Slovensko	Nariadenie vlády č. 33/2018 Z. z. Nariadenie vlády Slovenskej republiky, ktorým sa mení a dopĺňa
		nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi
		s expozíciou chemickým faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Uradni list Republike Slovenije 04.06.2015 (1602) - Pravilnik o spremembah in dopolnitvah Pravilnika o
		varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu
SWE	Sverige	Hygieniska gränsvärden, AFS 2018:1
	TLV-ACGIH	ACGIH 2019

CRISTOBALITE							
Threshold Limit Value Type	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	DNK	0,15					
VLA	ESP	0,05				RESP	
VLEP	FRA	0,05				RESP	(aerosol).
AK	HUN	0,15				RESP	(aerosol).
NGV/KGV	SWE	0,05				RESP	

DIPOTASSIUM HEXAFLUOTOTITANATE			
Predicted no-effect concentration - PNEC			
Normal value in fresh water	0.131	mg/l	
Normal value in marine water	0,131	mg/l	
Normal value for fresh water sediment	24,45	mg/kg/d	

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Normal value for marine water	sediment			4,89	mç	ı/kg/d		
Normal value for water, intermi	ttent release			0,108	mç	1 /l		
Normal value of STP microorga	anisms			1,5	mç	1 /l		
Normal value for the terrestrial	compartment			19,1	mç	ı/kg		
Health - Derived no-effect	Effects on	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
Inhalation				systemic	VND	systemic 5,2 mg/m3	5,2 mg/m3	systemic 5,2 mg/m3
Skin	NPI	37,5 mg/kg bw/d	NPI	37,5 mg/kg bw/d	NPI	75 mg/kg bw/d	NPI	75 mg/kg bw/d
ZINC OXIDE								
Threshold Limit Value Type	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
TLV	BGR	5		10			като цин	K
TLV	CZE	2		5			Jako Zn	
MAK	DEU	2		4		INHAL		
MAK	DEU	0,1		0,4		RESP		
TLV	DNK	4					Som Zn	
VLA	ESP	2		10				
HTP	FIN	2		10				
VLEP	FRA	5						
TLV	GRC	5		10				
GVI/KGVI	HRV	2		10		RESP		
AK	HUN	5		20		RESP		
TLV	NOR	5						
NDS/NDSCh	POL	5		10		INHAL		
TLV	ROU	5		10				
NPEL	SVK	1		1		RESP		
MV	SVN	5		20		RESP		
NGV/KGV	SWE	5						
TLV-ACGIH		2		10				
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				117	mç	1/1		
Normal value in marine water				0,0061	mç	1 /l		
Normal value for fresh water se	ediment			117	mç	ı/kg		
Normal value for marine water	sediment			56,5	mç	ı/kg		
Normal value of STP microorga	nnisms			0,052	mç	ŋ/l		
Normal value for the terrestrial				35,6	mç	ı/kg		
Health - Derived no-effect	Effects on consumers	DMEL			Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

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2 1				0.00 // //				
Oral				0,83 mg/kg/d				
Inhalation				2,5 mg/m3				5 mg/m3
Skin				87 mg/kg/d				87 mg/kg/d
VASELIN OIL Threshold Limit Value								
Туре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
AGW	DEU	5		20		RESP		
MAK	DEU	5		20		RESP		
TLV	ROU	5		10				
Health - Derived no-effect	Effects on	DMEL			Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Oral			VND	systemic 40 mg/kg/d		systemic		systemic
Inhalation			VND	35 mg/m3			VND	160 mg/m3
Skin			VND	93 mg/kg/d			VND	220 mg/kg/d
SKIII			VIID	35 mg/kg/u			VIND	220 mg/kg/0
SODIUM PYROPHOSPHA Threshold Limit Value	TE							
Гуре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
TLV	DNK	5						
VLEP	FRA	5						
WEL	GBR	5						
GVI/KGVI	HRV	5						
TLV	NOR	5						
MV	SVN	5				INHAL		
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				0,05	mç	g/l		
Normal value in marine water				0,005	mç	g/l		
Normal value for water, intermit	tent release			0,5	mç	g/l		
Health - Derived no-effect	Effects on	DMEL			Effects on			
Route of exposure	consumers Acute local	Acute systemic	Chronic local	Chronic	workers Acute local	Acute	Chronic local	Chronic
Inhalation			0.68 mg/m3	systemic VND		systemic	2,79 mg/m3	systemic VND
D-CARVONE								
Predicted no-effect concentration	on - PNEC							
Normal value in fresh water				0,5	mg	g/l		
Normal value in marine water				0,05	mç	g/l		
Normal value for fresh water se	diment			0,861	mç	g/kg		
Normal value for marine water s	sediment			0,0861	mç	g/kg		

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Normal value of STP microorganisms					mg	ı/l		
Normal value for the terrestrial compartment				0,143	mg/kg			
Health - Derived no-effo	ect level - DNEL / I	OMEL						
Effects on					Effects on			
	consumers				workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic
				systemic		systemic		systemic

4,29 mg/kg

 bw/d

 Inhalation
 8450 mg/m3
 47500 mg/m3

 Skin
 4,29 mg/kg bw/d
 12 mg/kg bw/d

Legend:

Oral

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

During the risk assessment process, it is essential to take into consideration the ACGIH occupational exposure levels for inert particulate not otherwise classified (PNOC respirable fraction: 3 mg/m3; PNOC inhalable fraction: 10 mg/m3). For values above these limits, use a P type filter, whose class (1, 2 or 3) must be chosen according to the outcome of risk assessment.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

Use a type P filtering facemask, whose class (1, 2 or 3) and effective need, must be defined according to the outcome of risk assessment (see standard EN 149).

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

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SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance powder
Colour orange
Odour mint

Odour threshold Not available рН Not applicable Melting point / freezing point Not applicable Initial boiling point Not applicable Boiling range Not applicable Flash point Not available Not applicable **Evaporation Rate** not applicable Flammability of solids and gases Lower inflammability limit Not available Upper inflammability limit Not available Not available Lower explosive limit Upper explosive limit Not available Vapour pressure Not applicable Vapour density Not applicable Relative density 0,2-0,5 g/cm3

Solubility partially soluble in water

Partition coefficient: n-octanol/water Not available
Auto-ignition temperature Not available
Decomposition temperature Not available
Viscosity Not applicable
Explosive properties Not available
Oxidising properties Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The powders are potentially explosive when mixed with air.

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10.4. Conditions to avoid

Avoid environmental dust build-up.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:
Not classified (no significant component)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class (INTERNAL TEST Bridging Principle, OECD 437 resp. EU Method B.47, GLP, in vitro, study report 2014).

RESPIRATORY OR SKIN SENSITISATION

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May produce an allergic reaction. Contains:D-CARVONE

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

May cause damage to lungs.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

CRISTOBALITE

Acute Toxicity: No data available.

Irritation/Corrosion

Skin irritation: Not irritating (MSDS supplier). Eye irritation: Slightly irritating (MSDS supplier). Sensitization: Not sensitizing (MSDS supplier).

Mutagenicity: Does not meet the classification criteria for this hazard class (MSDS supplier).

Carcinogenicity: IARC (group 1), NTP (RAHC), ACGIH (A2) (IARC).

Toxicity to reproduction: Does not meet the classification criteria for this hazard class (MSDS supplier).

Toxicity for aspiration: Not applicable.

STOT Repeated Exposure: Adverse effects on lungs (fibrosis-silicosis)(MSDS supplier).

In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However it pointed out that not all industrial circumstances, nor all crystalline silica types, were to be incriminated (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France).

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003).

There is a body of evidence supporting the fact that increased cancer risk would not be limited to people already suffering from silicosis. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

DIPOTASSIUM HEXAFLUOROTITANATE

LD50 (Dermal(. 324 mg/kg (OECD 401, rat, SDS supplier).

Acute Toxicity

Inhalation: No data available. Dermal: No data available.

Irritation/Corrosion

Skin irritation: Not irritating (OECD 404, in vivo, rabbit, MSDS supplier). Eye irritation: Corrosive (OECD 405, in vivo, rabbit, MSDS supplier).

Skin sensitization: Not sensitising (OECD 406, GLP, Guinea pig maximisation test, MSDS supplier).

STOT Repeated/single exposure: No data available.

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Genotoxicity in vitro: Negative (OECD 471, Test di Ames); Positive (OECD 487,476; chromosomic aberration) (MSDS supplier).

Genotoxicity in vivo: Positive (OECD 474, rat, SDS supplier).

Carcinogenicity: No data available. Toxicity to reproduction: No data available.

ZINC OXIDE

LD50 (Oral) > 5000 mg/kg (OECD 401, rat, ECHA dossier).

LD50 (Dermal) > 2000 mg/kg (OECD 402, GLP, rat, ECHA dossier).

LC50 (Inhalation) > 5,7 mg/l (OECD 403, rat, ECHA dossier).

Irritation/Corrosion

Skin irritation: Not irritating (publication, in vivo, guinea pig, ECHA dossier). Eye irritation: Not irritating (OECD 405, GLP, in vivo, rabbit, ECHA dossier).

Skin Sensitization: Not sensitizing (OECD 406, GLP, Guinea pig maximisation test, ECHA dossier).

STOT – Single/Repeated exposure: No data available. Genotoxicity in vitro: Negative (OECD 471, ECHA dossier).

Genotoxicityin vivo: Negative (OECD 474, GLP, mouse, ECHA dossier).

Carcinogenicity: No data available. Toxicity to reproduction: No data available. Toxicity for aspiration: Not applicable.

VASELIN OIL

LD50 (Oral).> 5000 mg/kg (similar or equivalent to OECD 401, rat, dossier ECHA)

LD50 (Dermal) > 2000 mg/kgbw (similar or equvalent to OECD 402, rabbit, dossier ECHA)

LC50 (Inhalation). > 5 mg/L (OECD 403, rat, 4h, dossier ECHA)

Irritation/Corrosion

Skin irritation: No data available. Eye irritation: No data available. Skin Sensitization: No data available.

STOT - Repeated/single exposure: No data available.

CMR effects: No data available.

Aspiration toxicity: toxic for aspiration (MSDS supplier).

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity

ZINC OXIDE

EC50 - for Algae / Aquatic Plants 0,17 mg/l/72h (Pseudokirchnerella subcapitata, SDS supplier). Chronic NOEC for Algae / Aquatic Plants 0,017 mg/l (Pseudokirchnerella subcapitata, SDS supplier).

DIPOTASSIUM HEXAFLUOTOTITANATE

LC50 - for Fish 172 mg/l/96h (OECD 203, Danio rerio, ECHA dossier). EC50 - for Crustacea 48,2 mg/l/48h (OECD 203, Daphnia magna, ECHA dossier).

10,81 mg/l/72h (OECD 201, Pseudokirchneriella subcapitata, ECHA dossier). EC50 - for Algae / Aquatic Plants Chronic NOEC for Algae / Aquatic Plants 1,31 mg/l (OECD 201, Pseudokirchneriella subcapitata, ECHA dossier).

12.2. Persistence and degradability

SODIUM PYROPHOSPHATE

Degradability: information not available

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ZINC OXIDE

Solubility in water

2,9 mg/l

Degradability: information not available

NOT rapidly degradable

VASELIN OIL

Entirely degradable

CRISTOBALITE

NOT rapidly degradable

DIPOTASSIUM HEXAFLUOTOTITANATE

NOT rapidly degradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

Zhermack S.p.a Dated 31/07/2019 C302205, C302205., C302230 - NEOCOLLOID Printed on 31/07/2019 Page n. 14/17 Replaced revision:2 (Dated: 29/09/2016) According to Annex II to REACH - Regulation 2015/830 Safety Data Sheet 14.1. UN number Not applicable 14.2. UN proper shipping name Not applicable 14.3. Transport hazard class(es) Not applicable 14.4. Packing group Not applicable 14.5. Environmental hazards Not applicable 14.6. Special precautions for user Not applicable 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Information not relevant **SECTION 15. Regulatory information**

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

<u>Product</u>

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None

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

U.S. State Regulations California Proposition 65.

WARNING: This product can expose you to silica, crystalline (airborne particles of respirable size), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4 Acute toxicity, category 4

STOT RE 1 Specific target organ toxicity - repeated exposure, category 1

Asp. Tox. 1 Aspiration hazard, category 1

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Eye Dam. 1 Serious eye damage, category 1
Skin Sens. 1B Skin sensitization, category 1B

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aquatic Chronic 1 Hazardous to the aquatic environment, chronic toxicity, category 1

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H302 Harmful if swallowed.

H372 Causes damage to organs through prolonged or repeated exposure.

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H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

I FGFND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008 **DNEL: Derived No Effect Level**
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
- 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
- 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP) 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition

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- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

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.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.