Printing date 14.12.2018

Revision: 14.12.2018

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

- · 1.1 Product identifier
- · Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders
- · Article number: 1455, 1104
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture powder component of the SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

SPEIKO-Dr. Speier GmbH, Walther-Rathenau-Str. 59, 33602 Bielefeld, GERMANY Tel. +49/521/770107-0

- · Further information obtainable from: SPEIKO-Dr.Speier GmbH, info@speiko.de
- · 1.4 Emergency telephone number:

Giftnotruf Berlin Tel. +49/30/30686 700

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS09 environment

H400 Very toxic to aquatic life. Aquatic Acute 1

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

- · 2.2 Label elements Medical products are exempted from labelling acc. (EC) No 1272/2008 (Art. 1 (5) d))
- · Labelling according to Regulation (EC) No 1272/2008

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

- · Hazard pictograms GHS09
- · Signal word Warning
- · Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P273 Avoid release to the environment.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous compone	ents:		
CAS: 1314-13-2 EINECS: 215-222-5	zinc oxide	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	93.0%
CAS: 1309-48-4 EINECS: 215-171-9	magnesium oxide	substance with a Community workplace exposure limit	7.0%
EINECS. 213-1/1-9		(Contd.	1

Printing date 14.12.2018 Revision: 14.12.2018

Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders

(Contd. of page 1)

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: 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: Use fire extinguishing methods suitable to surrounding conditions.
- · 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- · 6.2 Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

- · 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
- · 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 void
- · Information about fire and explosion protection: No special measures required.
- · 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: Not required.
- · Further information about storage conditions: None.
- · Storage class: 13
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 3)

Printing date 14.12.2018 Revision: 14.12.2018

Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders

(Contd. of page 2)

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

1309-48-4 magnesium oxide

WEL Long-term value: 10* 4** mg/m³

(as Mg) *inhalable dust **fume and respirable dust

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- · Respiratory protection: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and cl · General Information	hemical properties
· Appearance:	
Form:	powder
Colour:	yellowish (variants)
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not applicable.
Change in condition	
Melting point/freezing point:	~2,000 °C
Initial boiling point and boiling range:	Undetermined.
	not applicable, sublimation
· Flash point:	Not applicable.
· Flammability (solid, gas):	Not determined.
	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.

(Contd. on page 4)

Printing date 14.12.2018 Revision: 14.12.2018

Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders

		(Contd. of page 3
· Density at 20 °C:	5.4427 g/cm³	
Relative density	Not determined.	
· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
water:	Insoluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
VOC (EC)	0.00 %	
Solids content:	100.0 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 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 toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · 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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 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.
- · Ecotoxical effects:
- · Remark: Very toxic for fish

(Contd. on page 5)

Printing date 14.12.2018 Revision: 14.12.2018

Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders

(Contd. of page 4)

- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information		
· 14.1 UN-Number	1	
· ADR, IMDG, IATA	UN3077	
· 14.2 UN proper shipping name		
· ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANC	
	SOLID, N.O.S. (zinc oxide)	
· IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANC	
	SOLID, N.O.S. (zinc oxide), MARINE POLLUTANT	
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANC	
	SOLID, N.O.S. (zinc oxide)	
· 14.3 Transport hazard class(es)		
ADR, IMDG, IATA		
A		
V		
Class	9 Miscellaneous dangerous substances and articles.	
Label	9	
14.4 Packing group		
ADR, IMDG, IATA	III	
14.5 Environmental hazards:		
Marine pollutant:	Yes	
	Symbol (fish and tree)	
Special marking (ADR):	Symbol (fish and tree)	
Special marking (IATA):	Symbol (fish and tree)	
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances an	
	articles.	
Danger code (Kemler):	90	
EMS Number:	F- A , S - F	
Stowage Category	A	

Printing date 14.12.2018 Revision: 14.12.2018

Trade name: SPEIKO Zinc Phosphate Cement and SPEIKO Carboxylate Cement powders

	(Contd. of page 5
Stowage Code	SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
14.7 Transport in bulk according to Anne	ex II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
· ADR	
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
Transport category	3
Tunnel restriction code	E
· IMDG	
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOU.
	SUBSTANCE, SOLID, N.O.S. (ZINC OXIDE), 9, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E1 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 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.

· Relevant phrases

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport 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

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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) VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1