Tel.: +49 (0)2821 997 32-0

Fax: +49 (0)2821 997 32 29

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

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

· Date of compilation: 30.10.2015

· 1.1 Product identifier

· Trade name: FLX-CRM124

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

No further relevant information available.

- · Application of the substance / the preparation: casting powder
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer / Supplier: FLUXANA® GmbH & Co. KG Borschelstraße 3, 47551 Bedburg-Hau

Germany

- · E-mail address of the competent person responsible for the Safety Data Sheet: sdb@csb-online.de
- · Informing department: Sales
- · 1.4 Emergency telephone number: As above or next toxicological information centre.

SECTION 2: Hazards identification

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

The product is not classified as hazardous according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Additional information:

Safety data sheet available on request.

- · 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 the substances listed below with nonhazardous additions.

· Dangerous compone	ents:		
CAS: 497-19-8 EINECS: 207-838-8 Index number: 011-005-00-2		Sodium carbonate © Eye Irrit. 2, H319	2.5-<10%
CAS: 1313-13-9 EINECS: 215-202-6 Index number: 025-001-00-3		manganese dioxide • Acute Tox. 4, H302; Acute Tox. 4, H332	2.5-<10%
· Other components:			
CAS: 130885-09-5 amorph		ous aluminum silicate	40 - 80%
CAS: 1318-16-7 Bauxite			30 - 50%
CAS: 14940-68-2 EINECS: 239-019-6		ım silicate	5 - 15%
CAS: 14808-60-7 EINECS: 238-878-4	Quartz ((SiO_2)	0.1 -1.0%
		(Co	ontd. on page 2)

GB

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 1)

· Additional information: For the wording of the listed risk 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 symptoms.
- · After skin contact:

Wash with plenty of soap and water.

Take off contaminated clothing.

If skin irritation continues, consult a doctor.

· After eye contact:

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

Remove contact lenses, if present and easy to do.

· After swallowing:

Rinse out mouth and then drink plenty of water.

In case of persistent symptoms 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 symptomatic treatment

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents Use fire fighting measures that suit the environment.
- · 5.2 Special hazards arising from the substance or mixture

Can be released in case of fire:

Hydrogen fluoride (HF)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

If without risk possible, move drums with material away from dangerous area.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Avoid causing dust.

Do not breathe dust.

Avoid contact with skin and eyes.

- · 6.2 Environmental precautions: Do not allow to enter drainage system, surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Collect mechanically.

Send for recovery or disposal in suitable containers.

Dispose of the material collected according to regulations.

· 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 information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 3)

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 2)

Any deposit of dust which cannot be avoided must be removed regularly.

Do not breathe dust.

Make sure that all applicable workplace limits are observed.

- · Information about protection against explosions and fires: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and containers:

Store only in the original container.

Observe all local and national regulations for storage of water polluting products.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with strong acids.

· Further information about storage conditions:

Store container in a well ventilated position.

Store in cool, dry conditions in well sealed containers.

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

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with critical values that require monitoring at the workplace:

Observe all workplace limits for dust.

7789-75-5 Calcium fluori	de	
WEL (Great Britain)	Long-term value: 2.5 mg/m³	
	as F	
IOELV (European Union)	Long-term value: 2.5 mg/m³	
	as F	
1313-13-9 manganese dio	xide	
WEL (Great Britain)	Long-term value: 5 mg/m³	
	as Mn	
· DNELs		
497-19-8 Sodium carbona	te	
Inhalative DNEL long-ter	m exposure - systemic effects 10 mg/m³ (general population)	
	$10 \text{ mg/m}^3 \text{ (worker)}$	

- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Wash hands during breaks and at the end of the work.

Use skin protection cream for preventive skin protection.

Do not eat, drink or smoke while working.

Do not breathe dust.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Dispose of or clean any contaminated garments thoroughly.

- · Breathing equipment: Use breathing protection in case of dust formation.
- · Recommended filter device for short term use:

Filter P2

Filter P3

· Protection of hands:

Protective gloves

(Contd. on page 4)

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 3)

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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Eye protection: Safety glasses recommended during refilling.
- · Body protection:

Protective work clothing

Body protection must be chosen depending on activity and possible exposure.

· Limitation and supervision of exposure into the environment

Do not allow to enter drainage system, surface or ground water.

9.1 Information on basic physical a	and chemical properties	
General Information		
Appearance: Form:	Granulate	
Colour:	dark grey	
Smell:	odourless	
Odour threshold:	not determined	
pH-value:	not determined	
Change in condition		
Melting point/Melting range:	not determined	
Boiling point/Boiling range:	not determined	
Flash point:	not applicable	
Inflammability (solid, gaseous)	Not determined.	
Ignition temperature:	not determined	
Decomposition temperature:	Not determined.	
Self-inflammability:	Product is not selfigniting.	
Danger of explosion:	Product is not explosive.	
Critical values for explosion:		
Lower:	not applicable	
Upper:	not applicable	
Oxidising properties	not determined	
Vapor pressure:	Not applicable.	
Density:	not determined	
Relative density	Not determined.	
Vapour density (AIR = 1):	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	insoluble	

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 4)

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

dynamic: Not applicable. kinematic: Not applicable.

• 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:

Strong acids

Strong oxidizing agents

· 10.6 Hazardous decomposition products:

Hydrogen fluoride

Carbon monoxide (CO) and Carbon dioxide (CO₂)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

	· Acute toxu	cuy						
Γ	· LD/LC50	values tha	t are relevant for classification:					
	497-19-8 S	497-19-8 Sodium carbonate						
Г	Oral	<i>LD50</i>	D50 4090 mg/kg (rat)					
	Dermal	LD50	2000 mg/kg (rabbit)					
	Inhalative	LC50/2h	2300 mg/m³ (rat, male)					
	1313-13-9	1313-13-9 manganese dioxide						
	Oral	LD50	> 3478 mg/kg (rat)					
L	Oral	LD50	> 34/8 mg/kg (rat)					

- · Primary irritant effect:
- · Skin corrosion/irritation Dust particles may mechanically irritate the skin.
- · Serious eye damage/irritation Dust particles may mechanically irritate the eye.
- · 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:

497-19-8 Sodium carbonate

EC50/48 h 256 mg/l (water flea (daphnia magna))

LC50/96 h 740 mg/l (gambusia affinis)

(Contd. on page 6)

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 5)

300 mg/l (bluegill (lepomis macrochirus))

- · 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.
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Water hazard class 1 (Self-assessment): slightly hazardous for water

- · 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 of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

· European waste catalogue:

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- · Uncleaned packagings:
- · Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product. Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

14.1 UN-Number	
ADR, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Ani	nex II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.

(Contd. on page 7)

Printing date 02.11.2015 Version number 1 Revision: 02.11.2015

Trade name: FLX-CRM124

(Contd. of page 6)

- · National regulations
- · Decree to be applied in case of technical fault: Directive 2012/18/EU does not apply.
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

· Department issuing MSDS:

C.S.B. GmbH Phone: +49 - 2151 - 652086-0 Düsseldorfer Str. 113 Fax: +49 - 2151 - 652086-9

47809 Krefeld / Germany

· Abbreviations and acronyms:

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

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

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

 $vPvB: \ very \ Persistent \ and \ very \ Bioaccumulative$

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

· Sources: These data are based on information submitted by pre-suppliers.

GB