Safety Data Sheet

Concrete Enforcer 405

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

1.1. Product identifier

Trade name: Concrete Enforcer 405

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

Recommended uses: Surface treatment. Primer and hardener. Application with roller or brush. Treatment of items through dipping or pouring. Industrial spraying. Industiral use in the chemical /fertiliser /photographic /Offshore industry as such (substance itself) or in a mixture.

PC: Non-metal-surface treatment products (PC15)

PROC: Industrial spraying (PROC7). Roller application or brushing (PROC10).

TF: Impregnation agent

LCS: Consumer use (C) Widespread use by professional workers (PW)

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company: Bollerup Jensen Retail A/S
Address: Bindesbølvej 16-20, Ådum
Zip code: 6880
City: Tarm
Country: DENMARK
E-mail: info@bollerup-jensen.dk
Phone: +45 9737 6033
Homepage: www.bollerupjensen.dk

1.4. Emergency Telephone Number

Members of the public: 111 (NHS 111 (Scotland: NHS 24))

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Skin Irrit. 2;H315 Eye Dam. 1;H318

Most serious harmful effects: Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Pictograms

Signal word: Danger

H-phrases

H315 Causes skin irritation.
H318 Causes serious eye damage.

P-phrases

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.

Supplemental information

Safety data sheet available for professional users on request.

2.3. Other hazards

The product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No	EC No	REACH Reg. No.	Concentration	Notes	CLP-classification
Potassiumsilicate MR >3,2 (lumps)	1312-76-1	215-199-1	01-2119456888-17-xxxx	25 - 50%		
potassium hydroxide 50%	1310-58-3	215-181-3	01-211948713-6-33	5 - 15%		Met. Corr. 1;H290 Acute Tox. 4;H302 Skin Corr. 1A;H314

Please see section 16 for the full text of H-phrases.

Ingredient comments: 30% and more: Solutions: 2.6>=MR>1.6

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Do not induce vomiting. Seek medical advice immediately.

Skin contact: Take off contaminated clothing and wash before reuse. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.

Eye contact: Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.

General: When obtaining medical advice, show the safety data sheet or label.

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

Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight. May irritate the skin - may cause reddening. Inhalation of spray mist may cause irritation to the upper airways.

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

Treat symptoms.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: The product is not directly flammable. Choose extinguishing agents based on the surrounding fire. Extinguish with powder, foam, carbon dioxide or water mist.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

The product is not directly flammable. Avoid inhalation of vapour and fumes - seek fresh air.

5.3. Advice for fire-fighters

Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit. Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Stop leak if this can be done without risk. Wear safety goggles. Wear gloves.

For emergency responders: Normal protective clothing equivalent to EN 469 is recommended.

6.2. Environmental precautions

Do not discharge large quantities of concentrated spills and residue into drains. Notify proper authorities in case of contamination of soil or aquatic environment or discharge to drains.

6.3. Methods and material for containment and cleaning up

Wipe up minor spills with a damp cloth. Sweep up/collect spills for possible reuse or transfer to suitable waste containers. Rinse with water.

6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Running water and eye wash equipment must be available. A safety shower should be available.

7.2. Conditions for safe storage, including any incompatibilities

Keep in tightly closed original packaging. The product should be stored safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Store frost-free.

7.3. Specific end use(s)

No special uses in addition to identified uses in 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m³	fiber/cm3	Comments	Remarks
potassium hydroxide 50%	15m		2			

Measuring methods: Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis: EH40/2005 Workplace exposure limits. Last amended January 2020.

DNEL - workers

potassium hydroxide 50%, cas-no 1310-58-3					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - local effects)	1 mg/m³				

DNEL - general population

potassium hydroxide 50%, cas-no 1310-58-3					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - local effects)	1 mg/m³				

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection: Wear safety goggles.

Personal protective equipment, hand protection: Wear gloves. Type of material: Nitrile rubber/ Neoprene rubber/ Butyl rubber/ Rubber.

Personal protective equipment, respiratory protection: Not required.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Liquid
Colour	Colourless
Odour	Odourless
Solubility	Soluble
Explosive properties	No data
Oxidising properties	No data

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)	13	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flash Point	No data	
Evaporation rate	No data	
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	No data	
Vapour pressure	No data	
Vapour density	No data	
Relative density	1.14 g/ml	
Partition coefficient n-octonol/water	No data	
Auto-ignition temperature	No data	

Decomposition temperature	No data	
Viscosity	No data	
Odour threshold	No data	

9.2 Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Strongly alkaline, reacts violently with oxidising agents. Dissolves/corrodes aluminium, tin, lead and zinc and alloys with these metals. Reacts under heat generation with the following: Acids.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

May react powerful by contact with acids and metals.

10.4. Conditions to avoid

Avoid direct sunlight.

10.5. Incompatible materials

Acids/ Metals.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 5000mg/kg bw	Irritating		

Ingestion may cause discomfort.

Acute toxicity - dermal

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50		> 5000mg/kg bw	Irritating		

Test data are not available.

Acute toxicity - inhalation

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50		> 2.06g/m³	Irritating to the respiratory system.		

No hazards.

Skin corrosion/irritation: May irritate the skin - may cause reddening.

Serious eye damage/eye irritation

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
				Irritating		

Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious eye injury and loss of sight.

Respiratory sensitisation or skin sensitisation: Test data are not available.

Germ cell mutagenicity: Test data are not available.

Carcinogenic properties: Test data are not available.

Reproductive toxicity: Test data are not available.

Single STOT exposure

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Human				Irritating to the respiratory system.		

Test data are not available.

Repeated STOT exposure

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	NOAEL		159mg/kg bw/day	Oral.		

Test data are not available.

Aspiration hazard: Test data are not available.

Other toxicological effects: None known.

SECTION 12: Ecological information

12.1. Toxicity

Potassiumsilicate MR >3,2 (lumps), cas-no 1312-76-1

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Leuciscus idus		48hLC50	> 146mg/l			
Crustacea	Daphnia magna		24hEC50	> 146mg/l			

Occasional major emissions or frequently recurring minor emissions may have a harmful or disturbing effect.

12.2. Persistence and degradability

Mixable with water. May spread in the aquatic environment.

12.3. Bioaccumulative potential

No bioaccumulation expected.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

The product affects the pH value of the local aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Collect concentrated spills and major waste in closed, leak-proof containers for disposal at the local hazardous waste site. Empty, cleansed packaging should be disposed of for recycling. Uncleansed packaging is to be disposed of via the local waste-removal scheme.

Category of waste: EWC code: Depends on line of business and use, for instance 06 02 99 wastes not otherwise specified

SECTION 14: Transport information

14.1. UN-No.:	Not applicable.	**14.4. Packing group:**	Not applicable.
14.2. UN proper shipping name:	Not applicable.	**14.5. Environmental hazards:**	Not applicable.
14.3. Transport hazard class(es):	Not applicable.		

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

SECTION 15: Regulatory information

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

Special Provisions: Regulation (EC) of the European Parliament and on the Council no. 1272/2008. Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

15.2. Chemical Safety Assessment

Other Information: Chemical safety assessment has not been performed.

SECTION 16: Other information

Abbreviations: DNEL: Derived No Effect Level PNEC: Predicted No Effect Concentration STOT: Specific Target Organ Toxicity PBT: Persistent, Bioaccumulative and Toxic vPvB: Very Persistent and Very Bioaccumulative

References to literature and data sources: CEES (Centre Européen d'Etude des Silicates) June 2014 ECHA reg. sub.: ECHA database for information on registered substances.

Other Information: This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.

Training advice: A thorough knowledge of this safety data sheet should be a prerequisite condition.

Classification method: Expert judgement. Calculation based on the hazards of the known components.

List of relevant H-statements

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

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H315	Causes skin irritation.
H318	Causes serious eye damage.

SDS is prepared by

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