Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 21.11.2025 Version number 1 Revision: 19.11.2025

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

· **1.1 Product identifier**

· **Trade name: NKI 500**

· **Article number:** 209142

· **Description:** Soda lime with indicator

· **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:** Carbon dioxide absorbent for BOD measurements

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Xylem Analytics Germany GmbH
WTW
Am Achalaich 11
82362 Weilheim
Germany
Tel. +49 881 183-0

· **Further information obtainable from:** E-mail: Info.WTW@xylem.com

· **1.4 Emergency telephone number:** Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008:**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
STOT SE 3 H335 May cause respiratory irritation.

· **2.2 Label elements:**

· **Labelling according to Regulation (EC) No 1272/2008:**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms:**



GHS05 GHS07

· **Signal word:** Danger

· **Hazard-determining components of labelling:**
calcium dihydroxide
Sodium hydroxide

· **Hazard statements:**
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

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· **Precautionary statements:**

P234	Keep only in original packaging.
P260	Do not breathe dust.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

· **2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components with endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

Environmental information: The substance/mixture does not contain components with endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% or more.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:** Solids mixture

· **Dangerous components:**

CAS: 1305-62-0 EINECS: 215-137-3	calcium dihydroxide Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335	70-90%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	Sodium hydroxide Met. Corr.1, H290; Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	2-<4%

· **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:**
Take affected persons into fresh air and keep quiet.
Consult a doctor.

· **After skin contact:**
Wash skin with water or shower.
Take off contaminated clothing.
If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact:**
Rinse opened eye for at least 15 minutes under running water.
Consult an ophthalmologist immediately.
Remove contact lenses.

· **After swallowing:**
Make victim drink water immediately (2 glasses at most).
Do not induce vomiting (risk of perforation)
Do not attempt to neutralize.
Call a doctor immediately.

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· **4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described on the labelling (see section 2.2) and/or in chapter 11.

· **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:** The product is not flammable. Extinguishing agent to suit environment.
· **For safety reasons unsuitable extinguishing agents:** Carbon dioxide

· **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Sodium oxides
Calcium oxide
Silicon oxides

· **5.3 Advice for firefighters**
· **Protective equipment:**
Stay in the danger zone only with self-contained breathing apparatus. Avoid skin contact by keeping a safe distance or wearing suitable protective clothing.
· **Additional information** Do not allow extinguishing water to enter the surface water or groundwater system.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear personal protective equipment (see section 8).

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose of the material collected according to regulations.
Wash off residuals with water.

· **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.

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SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Wear personal protective equipment (see section 8)
· **Information about fire - and explosion protection:** No special measures required.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Requirements to be met by storerooms and receptacles:**
Do not use metal containers.
Recommendation: Store in the original container.
· **Information about storage in one common storage facility:** Do not store together with acids.
· **Further information about storage conditions:**
Keep container tightly sealed.
Store in dry conditions.
Recommended storage temperature: 15 - 25 °C

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

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
CAS: 1305-62-0 calcium dihydroxide	
IOELV	Short-term value: 4 mg/m³ Long-term value: 1 mg/m³ Respirable fraction

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**
Avoid contact with the eyes and skin.
Take off contaminated clothing and wash it before reuse.
Do not inhale dust / smoke / mist.
Wash hands before breaks and at the end of work.

· **Respiratory protection:**
Required when dusts are formed.
Recommended filter type: P2

· **Hand protection** Protective gloves

· **Material of gloves**
- For full contact:
Nitrile rubber, NBR
Recommended material thickness: ≥ 0.11 mm
Breakthrough time: 480 min

- For splash contact:
Nitrile rubber
Recommended thickness of the material: ≥ 0.11 mm
Breakthrough time: 480 min

· **Eye/face protection** Safety goggles with side protection

· **Body protection:** Protective clothing

· **Environmental exposure controls** Do not allow product to reach ground water, water course or sewage system.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Colour:**	Light grey
· **Odour:**	Odourless
· **Melting point/freezing point:**	No data available.
· **Boiling point or initial boiling point and boiling range**	No data available.
· **Flammability**	Product is not flammable.
· **Flash point:**	Not applicable.
· **pH (50 g/l) at 20 °C**	>7 (filtered slurry)

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· **Solubility**	
· **water:**	Insoluble.
· **Density and/or relative density**	
· **Density:**	No data available.
· **Bulk density:**	0.70 - 0.85 g/ml
· **Particle characteristics**	See section 3.
· **9.2 Other information**	
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Information with regard to physical hazard classes**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**
The product is chemically stable under normal ambient conditions (room temperature).

· **10.3 Possibility of hazardous reactions**

Exothermic reactions with:
Carbon dioxide (CO_2)
Violent reaction with acids.
Formation of hydrogen possible with several metals and alloys in the presence of moisture (risk of explosion).

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** Metals

· **10.6 Hazardous decomposition products:** In case of fire: See section 5.

SECTION 11: Toxicological information

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

· **Acute toxicity** Based on available data, the classification criteria are not met.

· **Acute toxicity estimate of the mixture (ATE) - Calculation method:**

· **LD/LC50 values relevant for classification:**

CAS: 1305-62-0 calcium dihydroxide		
Oral	LD50	7340 mg/kg (Rat)
CAS: 1310-73-2 Sodium hydroxide		
Oral	LD50	2000 mg/kg (Rat)

· **Primary irritant effect:**

· **Skin corrosion/irritation**
Causes skin irritation.

· **Serious eye damage/irritation** Severe irritations, risk of cornea cloudness, risk of blindness.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **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.

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· **STOT-single exposure**
May cause respiratory irritation.
· **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.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**
The substance/mixture does not contain components that have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**	
CAS: 1310-73-2 Sodium hydroxide	
EC50	40.4 mg/l, 48 h (Ceriodaphnia) (ECHA)
EC50	22 mg/l, 15 min (Photobacterium phosphoreum) (supplier SDS)
LC50	125 mg/l, 96 h (Gambusia affinis) (ECOTOX)

· **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.

· **12.5 Results of PBT and vPvB assessment**
This product does not contain components classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in concentrations of 0.1% or higher.

· **12.6 Endocrine disrupting properties**
The substance/mixture does not contain components that have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

· **12.7 Other adverse effects**
· **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
· **Additional ecological information:**
· **General notes:** Detrimental effect due to shift of pH value.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

· **Uncleaned packaging:**
· **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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SECTION 14: Transport information

· **14.1 UN number or ID number**	
· **ADR/RID, IMDG, IATA**	Void
· **14.2 UN proper shipping name**	
· **ADR/RID, IMDG, IATA**	Void
· **14.3 Transport hazard class(es)**	
· **ADR/RID, ADN, IMDG, IATA**	
· **Class**	Void
· **14.4 Packing group**	
· **ADR/RID, IMDG, IATA**	Void
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· **UN "Model Regulation":**	Void

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.

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

· **Relevant phrases**
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.

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H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

· **Date of previous version:** 14.10.2021

· **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)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
ADR: Accord relatif au transport international 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
ATE: Acute toxicity estimate values
Met. Corr.1: Corrosive to metals – Category 1
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**