

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

I019-K60 hebro®add Aktiv

Version: 2.9

Revision Date: 02.09.2024

Print Date: 03.09.2024

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

1.1 Product identifier

Trade name : I019-K60 hebro®add Aktiv

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

Use of the Sub- : pH-value adjustment
stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : hebro chemie- ZN der Rockwood Specialties Group
GmbH
Rostocker Str. 40
41199 Mönchengladbach
Contact person : Zentrale hebro chemie
Telephone : +49 (0) 2166 6009-0
Telefax : +49 (0) 2166 6009-99
Contact person product safety : Abteilung Produktsicherheit
Telephone : +49(0)2166 6009-311
E-mail address : msds.de@hebro-chemie.de

1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:
+49 (0) 361 730 730

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1	H290: May be corrosive to metals.
Acute toxicity, Category 4	H302: Harmful if swallowed.
Skin corrosion, Category 1	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



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Signal word	:	Danger
Hazard statements	:	H290 May be corrosive to metals. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.
Precautionary statements	:	Prevention: P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. Response: P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P390 Absorb spillage to prevent material damage.

Hazardous components which must be listed on the label:

Potassium Hydroxide
Sodium metasilicate pentahydrate

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.

Ecological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

Toxicological information: This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous preparation of alkali and metasilicates

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Potassium Hydroxide	1310-58-3 215-181-3 01-2119487136-33	Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318	>= 25 - < 50

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		specific concentration limit Skin Corr. 1A; H314 ≥ 5 % Skin Corr. 1B; H314 2 - < 5 % Eye Irrit. 2; H319 0.5 - < 2 % Skin Irrit. 2; H315 0.5 - < 2 %	
Sodium metasilicate pentahydrate	10213-79-3 229-912-9 01-2119449811-37	Met. Corr. 1; H290 Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)	≥ 5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : First aider needs to protect himself.
Move out of dangerous area.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.
After contact with skin, wash immediately with plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Risks : Harmful if swallowed.
Causes serious eye damage.
Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam

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Carbon dioxide (CO₂)
Dry powder
Water spray jet

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : The product is not flammable.

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Use water spray to cool unopened containers.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Environmental precautions : Inform the relevant authorities if it enters sewers, aquatic environment or soil.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.
Suitable material for dilution or neutralization

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Have eye wash bottle or eye rinse ready at the work place.
Avoid contact with skin and eyes.

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Advice on protection against fire and explosion : Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a well-ventilated place.

Further information on storage conditions : Avoid contact with amphoteric metals (e.g. aluminium, lead, zinc). Protect from frost.

Advice on common storage : Do not store together with acids and ammonium salts.

Recommended storage temperature : 5 - 40 °C

7.3 Specific end use(s)

Specific use(s) : pH-value adjustment

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Potassium Hydroxide	1310-58-3	STEL	2 mg/m ³	GB EH40

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
Potassium Hydroxide	Workers	Inhalation	Long-term local effects	1 mg/m ³

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166
Face-shield

Hand protection

Material : Protective gloves complying with EN 374.
Break through time : > 60 min
Protective index : Class 3

Material : Nitrile rubber
Glove thickness : 0.4 mm

Material : butyl-rubber
Glove thickness : 0.5 mm

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Remarks	: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed.
Skin and body protection	: Chemical resistant protective clothing according to DIN EN 13034 (Type 6) Long sleeved clothing Chemical resistant apron
Respiratory protection	: Breathing apparatus needed only when aerosol or mist is formed.
Filter type	: Combined particulates, ammonia/amines, inorganic gas/vapour and organic vapour type (ABK-P)
Protective measures	: When using do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Follow the skin protection plan.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: colourless
Odour	: mild
Melting point/freezing point	: not determined
Boiling point/boiling range	: Method: DIN 51751 No data available
Upper explosion limit / Upper flammability limit	: not determined
Lower explosion limit / Lower flammability limit	: not determined
Auto-ignition temperature	: not determined
pH	: 12.5 (20 °C) Concentration: 10 g/l
Viscosity	

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Viscosity, kinematic : similar to water

Solubility(ies)
Water solubility : completely soluble

Partition coefficient: n-
octanol/water : Not applicable

Vapour pressure : not determined

Density : 1.41 g/cm³ (20 °C)
Method: DIN 51757

Relative vapour density : not determined

9.2 Other information

Explosives : No data available

Substances and mixtures,
which in contact with water,
emit flammable gases : No data available

Metal corrosion rate : Corrosive to metals

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable at normal ambient temperature and pressure.

10.3 Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with strong acids.

10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid : Acids

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10.6 Hazardous decomposition products

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 893.07 mg/kg
Method: Calculation method

Components:

Potassium Hydroxide:

Acute oral toxicity : LD50 (Rat): 333 mg/kg

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Germ cell mutagenicity

Not classified due to lack of data.

Carcinogenicity

Based on available data, the classification criteria are not met.

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

Not classified due to lack of data.

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

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11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for human health according to UK REACH Article 57(f),

SECTION 12: Ecological information

12.1 Toxicity

Components:

Potassium Hydroxide:

Toxicity to fish : LC50 (Fish): 28.6 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 203

LC50 (Gambusia affinis (Mosquito fish)): 80 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): > 100 mg/l
aquatic invertebrates Method: OECD Test Guideline 202

Sodium metasilicate pentahydrate:

Toxicity to fish : LC50 (Brachydanio rerio (Zebra danio)): 210 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1,700 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (Desmodesmus subspicatus (green algae)): > 345 mg/l
plants Exposure time: 72 h

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

Sodium metasilicate pentahydrate:

Bioaccumulation : Remarks: No data available

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12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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.

12.6 Endocrine disrupting properties

Product:

Assessment : This substance/mixture does not contain components considered to have endocrine disrupting properties for environment according to UK REACH Article 57(f).

12.7 Other adverse effects

Product:

Additional ecological information : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not let product enter drains.
Do not dispose of with domestic refuse.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 1814
RID : UN 1814
IMDG : UN 1814
IATA : UN 1814

14.2 UN proper shipping name

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ADR : POTASSIUM HYDROXIDE SOLUTION
RID : POTASSIUM HYDROXIDE SOLUTION
IMDG : POTASSIUM HYDROXIDE SOLUTION
IATA : Potassium hydroxide solution

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	: 8	
RID	: 8	
IMDG	: 8	
IATA	: 8	

14.4 Packing group

ADR
Packing group : II
Classification Code : C5
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

RID
Packing group : II
Classification Code : C5
Hazard Identification Number : 80
Labels : 8

IMDG
Packing group : II
Labels : 8
EmS Code : F-A, S-B
Remarks : Alkalis, Stow "separated from" SGG1 - acids.

IATA (Cargo)

Packing instruction (cargo aircraft) : 855
Packing instruction (LQ) : Y840
Packing group : II
Labels : Corrosives

IATA_P (Passenger)

Packing instruction (passenger aircraft) : 851
Packing instruction (LQ) : Y840
Packing group : II
Labels : Corrosives

14.5 Environmental hazards

ADR
Environmentally hazardous : no

RID
Environmentally hazardous : no

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IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	: Conditions of restriction for the following entries should be considered: Number on list 3
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	: Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	: Not applicable
Regulation (EC) on substances that deplete the ozone layer	: Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	: Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	: Not applicable

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H290	: May be corrosive to metals.
H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H335	: May cause respiratory irritation.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Eye Dam.	: Serious eye damage

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Met. Corr.	:	Corrosive to metals
Skin Corr.	:	Skin corrosion
STOT SE	:	Specific target organ toxicity - single exposure
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Other information : The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Classification of the mixture:

Met. Corr. 1	H290
Acute Tox. 4	H302
Skin Corr. 1	H314

Classification procedure:

Based on product data or assessment
Calculation method
Based on product data or assessment

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Eye Dam. 1

H318

Based on product data or assessment

GB / EN