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

### **1.1 Product identifier**

Trade name : A036-K10 hebro®nol AR

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

Use of the Sub- : Cleaner for professional application in industry and trade  
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

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## **SECTION 2: Hazards identification**

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

#### **Classification (REGULATION (EC) No 1272/2008)**

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 :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

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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.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Additional Labelling**

The following percentage of the mixture consists of ingredient(s) with unknown acute oral toxicity: 100 %

The following percentage of the mixture consists of ingredient(s) with unknown acute dermal toxicity: 100 %

The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 100 %

The following percentage of the mixture consists of ingredient(s) with unknown hazards to the aquatic environment: 54.45 %

**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.

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**

Chemical nature : Alkaline cleaner based on lye and silicates

**Components**

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Substances with a workplace exposure limit :			
Potassium Hydroxide	1310-58-3 215-181-3 01-2119487136-33	specific concentration limit Eye Irrit. 2; H319 0.5 - < 2 % Skin Corr. 1A; H314	>= 25 - < 50

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		>= 5 % Skin Corr. 1B; H314 2 - < 5 % Skin Irrit. 2; H315 0.5 - < 2 % Eye Irrit. 2; H319 0.5 - < 2 %	
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For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- 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 soap and water.
- 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 : Rinse mouth with water.  
 Never give anything by mouth to an unconscious person.  
 Do NOT induce vomiting.  
 If symptoms persist, call a physician.

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

- Symptoms : Erythema  
 Blistering  
 Pain
- Risks : corrosive effects

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

- Treatment : Treat symptomatically.  
 For specialist advice physicians should contact the Poisons Information Service.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry powder  
 Water spray jet
- Unsuitable extinguishing media : High volume water jet

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### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.  
Exposure to decomposition products may be a hazard to health.

### 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.

Further information : Use water spray to cool unopened containers.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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## 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.

### 6.4 Reference to other sections

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

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## 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.  
Product is used in dilutions with water

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.

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- Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place.
- Advice on common storage : Do not store together with acids and ammonium salts.
- Further information on storage stability : Keep at temperatures between 5°C and 40°C.

### 7.3 Specific end use(s)

- Specific use(s) : Cleaner for professional application in industry and trade

## 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 <sup>3</sup>	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 <sup>3</sup>
Sodium metasilicate pentahydrate	Workers	Inhalation	Long-term systemic effects	6.22 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	1.49 mg/kg bw/day

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Sodium metasilicate pentahydrate	Fresh water	7.5 mg/l
	Marine water	1 mg/l
	Sewage treatment plant	1000 mg/l

### 8.2 Exposure controls

#### Personal protective equipment

- Eye/face protection : Safety glasses with side-shields conforming to EN166  
 Face-shield
- Hand protection  
 Material : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
- 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.

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Skin and body protection	: Long sleeved clothing Chemical resistant apron Chemical resistant protective clothing according to DIN EN 13034 (Type 6)
Respiratory protection	: Breathing apparatus needed only when aerosol or mist is formed.
Filter type	: ABEK-filter
Protective measures	: Follow the skin protection plan. Wash hands before breaks and at the end of workday.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: colourless
Odour	: odourless : not determined
Boiling point/boiling range	: > 100 °C Method: DIN 51751
Upper explosion limit / Upper flammability limit	: not determined
Lower explosion limit / Lower flammability limit	: not determined
Flash point	: > 99 °C
Auto-ignition temperature	: not determined
pH	: 13 (20 °C) Concentration: 10 g/l
Viscosity Viscosity, kinematic	: similar to water
Flow time	: > 100 sec. Cross section: 6 mm
Solubility(ies) Water solubility	: 1,000 g/l completely soluble
Partition coefficient: n-octanol/water	: Not applicable
Vapour pressure	: 23 hPa (20 °C) Information taken from reference works and the literature.

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Density : 1.43 g/cm<sup>3</sup> (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

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## 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  
Ammonium salts  
Aluminium  
Lead  
Zinc  
Amphoteric metals are attacked developing hydrogen (combustible).

### 10.6 Hazardous decomposition products

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## SECTION 11: Toxicological information

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

#### Acute toxicity

#### Components:

#### Potassium Hydroxide:

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

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#### **Skin corrosion/irritation**

**Product:**

Remarks : Causes severe burns.

#### **Serious eye damage/eye irritation**

**Product:**

Remarks : Causes serious eye damage.

#### **Carcinogenicity**

**Product:**

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

### **11.2 Information on other hazards**

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## **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

### **12.2 Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

### **12.3 Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: No data available

### **12.4 Mobility in soil**

**Product:**

Mobility : Remarks: No data available

### **12.5 Results of PBT and vPvB assessment**

**Product:**



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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

No data available

#### 12.7 Other adverse effects

**Product:**

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

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### 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.

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### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR : UN 1760  
RID : UN 1760  
IMDG : UN 1760  
IATA : UN 1760

#### 14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, N.O.S.  
(Potassium Hydroxide)  
RID : CORROSIVE LIQUID, N.O.S.  
(Potassium Hydroxide)  
IMDG : CORROSIVE LIQUID, N.O.S.  
(Potassium Hydroxide)  
IATA : Corrosive liquid, n.o.s.  
(Potassium Hydroxide)

#### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	: 8	

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**RID** : 8  
**IMDG** : 8  
**IATA** : 8

#### 14.4 Packing group

##### ADR

Packing group : II  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8  
Tunnel restriction code : (E)

##### RID

Packing group : II  
Classification Code : C9  
Hazard Identification Number : 80  
Labels : 8

##### IMDG

Packing group : II  
Labels : 8  
EmS Code : F-A, S-B  
Remarks : Alkalis, Clear of living quarters.

##### IATA (Cargo)

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

##### IATA\_P (Passenger)

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

#### 14.5 Environmental hazards

##### ADR

Environmentally hazardous : no

##### RID

Environmentally hazardous : no

##### 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.

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## SECTION 15: Regulatory information

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

UK REACH List of substances subject to authorisation : Not applicable  
(Annex XIV)

UK REACH Candidate list of substances of very high : Not applicable  
concern (SVHC) for Authorisation

The Persistent Organic Pollutants Regulations (retained : Not applicable  
Regulation (EU) 2019/1021 as amended for Great Britain)

#### Other regulations:

### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

## SECTION 16: Other information

### Full text of other abbreviations

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; TECL -

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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:**

Skin Corr. 1                      H314  
Eye Dam. 1                      H318

**Classification procedure:**

Based on product data or assessment  
Based on product data or assessment

GB / EN