

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

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

1.1 Product identifier

Trade name : XA005-K60 hebro®HB-300 RH

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

Use of the Substance/Mixture : Cleaner (disinfection) for professional application in industry and trade

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 : Wolfgang Schaffers
Telephone : +49 (0) 2166 6009-0
Telefax : +49 (0) 2166 6009-99

Contact person product safety : Abteilung Produktsicherheit
E-mail address : info-produktsicherheit@gmx.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 (67/548/EEC, 1999/45/EC)

Corrosive

R34: Causes burns.
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)

Hazard pictograms :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Corrosive

R-phrase(s) : R34 Causes burns.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

S-phrase(s) : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 This material and its container must be disposed of as hazardous waste.
S51 Use only in well-ventilated areas.

Hazardous components which must be listed on the label:

- 1310-58-3 Potassium Hydroxide
- 5064-31-3 Trisodium-nitrilotriacetate
- 1310-58-3 Potassium Hydroxide

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Chemical nature : Cleaner of anionic and nonionic tensides, anorganic salts and corrosion protection

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Potassium Hydroxide	1310-58-3 215-181-3 01-2119487136-33	C; R35 Xn; R22	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1A; H314	>= 2.5 - < 5

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie

Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

2-Butoxyethanol	111-76-2 203-905-0 01-2119475108-36	Xn; R20/21/22 Xi; R36/38	Acute Tox. 4; H332 Acute Tox. 4; H312 Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	>= 2.5 - < 10
Benzenesulfonic acid, mono-C10-16-alkyl derivs., sodium salts	68081-81-2 268-356-1	Xn; R22 Xi; R38-R41	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 2.5 - < 5

For the full text of the R-phrases mentioned in this Section, see Section 16.
 For the full text of the H-Statements mentioned in this Section, see Section 16.
 For the full text of the Notas mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General advice : Take off contaminated clothing and shoes immediately.
- If inhaled : Provide fresh air.
 If unconscious place in recovery position and seek medical advice.
 Move to fresh air.
 Keep patient warm and at rest.
- In case of skin contact : Take off all contaminated clothing immediately.
 After contact with skin, wash immediately with plenty of soap and water.
 Do NOT use solvents or thinners.
 Consult a physician.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

- In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Keep eye wide open while rinsing.
- If swallowed : If swallowed, seek medical advice immediately and show this container or label.
Keep at rest.
Immediately give large quantities of water to drink.
Do NOT induce vomiting.
Provide fresh air.

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 (CO₂)
Dry powder
Water spray jet

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.
May react strongly with amphoteric metals (aluminium, lead, zinc, ..): forms Hydrogen (Combustible).

5.3 Advice for firefighters

- Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.
Use only breathing apparatus which are resistant against caustic compounds.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Further information : The product itself does not burn.
Use water spray to cool unopened containers.
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 materials 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).
Contaminated surfaces will be extremely slippery.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See chapter 8 and 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.
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.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

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

7.3 Specific end uses

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Potassium Hydroxide	1310-58-3	STEL	2 mg/m ³	2005-04-06	GB EH40
2-Butoxy-ethanol	111-76-2	TWA	20 ppm 98 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skin Indicative			
	111-76-2	STEL	50 ppm 246 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skin Indicative			
	111-76-2	TWA	25 ppm	2005-04-06	GB EH40
Further information	:	Sk: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
	111-76-2	STEL	50 ppm	2005-04-06	GB EH40
Further information	:	Sk: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			

DNEL/DMEL

Potassium Hydroxide : End Use: DNEL, Workers

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

	Exposure routes: Inhalation
	Potential health effects: Long-term local effects
	Value: 1 mg/m ³
2-Butoxyethanol	: End Use: DNEL, Workers
	Exposure routes: Inhalation
	Potential health effects: Long-term systemic effects
	Value: 98 mg/m ³

8.2 Exposure controls

Personal protective equipment

Respiratory protection	: not required
Hand protection	: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
Eye protection	: Tightly fitting safety goggles
Skin and body protection	: Wear suitable protective clothing.

Environmental exposure controls

General advice	: Inform the relevant authorities if it enters sewers, aquatic environment or soil.
----------------	---

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: yellow
Odour	: odourless
pH	: 9.7 at 10 g/l 20 °C
Boiling point/boiling range	: 100 °C Method: DIN 51751
Vapour pressure	: 23 hPa at 20 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Information taken from reference works and the literature.

Density : 1.15 g/cm³
at 20 °C
Method: DIN 51757

Water solubility : completely soluble

9.2 Other information

Explosivity : no data available

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds : no VOC duties

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed., No hazards to be specially mentioned.

10.2 Chemical stability

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

Hazardous decomposition products formed under fire conditions. : Carbon monoxide
Carbon dioxide (CO₂)
Hydrogen

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Potassium Hydroxide : LD50: 365 mg/kg
Species: rat

2-Butoxyethanol : LD50: 1,746 mg/kg
Species: rat

Benzenesulfonic acid, mono- : LD50: 438 mg/kg
C10-16-alkyl derivs., sodium : Species: rat
salts

Acute dermal toxicity

2-Butoxyethanol : LD50: > 2,000 mg/kg
Species: guinea pig
Method: OECD Test Guideline 402

Skin corrosion/irritation

Skin irritation : Causes burns.

Serious eye damage/eye irritation

Eye irritation : Causes burns.

Respiratory or skin sensitisation

Sensitisation : This information is not available.

Carcinogenicity

Remarks : Not classifiable as a human carcinogen.

Further information

: Has a degreasing effect on the skin.
Harmful if swallowed.
If swallowed, severe burns in the oral cavity and throat as well
as danger of perforation of the digestive tract and stomach.

SECTION 12: Ecological information

12.1 Toxicity

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Toxicity to fish : no data available

Toxicity to fish
Potassium Hydroxide : LC50: 28.6 mg/l
Exposure time: 24 h
Species: Fish
Method: OECD Test Guideline 203

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

2-Butoxyethanol : LC50: 1,490 mg/l
Exposure time: 96 h
Species: *Lepomis macrochirus* (Bluegill sunfish)

Toxicity to daphnia and other aquatic invertebrates
Potassium Hydroxide : EC50: > 100 mg/l
Species: *Daphnia*
Method: OECD Test Guideline 202

2-Butoxyethanol : EC50: 1,720 mg/l
Exposure time: 24 h
Species: *Daphnia*

Toxicity to algae
2-Butoxyethanol : Cell multiplication inhibition test EC0: 900 mg/l
Exposure time: 168 h
Species: *Scenedesmus quadricauda* (Green algae)

Toxicity to bacteria
2-Butoxyethanol : EC0: 700 mg/l
Exposure time: 16 h
Species: *Pseudomonas putida*

12.2 Persistence and degradability

Biodegradability : no data available

Biodegradability
2-Butoxyethanol : 100 %
Testing period: 28 d

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Readily biodegradable
Zahn-Wellens Test; EG 88/302

12.3 Bioaccumulative potential

Bioaccumulation : no data available

12.4 Mobility in soil

Mobility : no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

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.

Packaging : Do not dispose of with domestic refuse.
The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : 070601 aqueous washing liquids and mother liquors

SECTION 14: Transport information

ADR

UN number : 1760
UN proper shipping name : CORROSIVE LIQUID, N.O.S. Potassium Hydroxide
Transport hazard class(es) : 8
Packing group : III
Classification Code : C9
Hazard Identification Number : 80
Limited Quantity (LQ) Inner : 5.00 L
Packaging

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

Maximum quantity : 30.00 KG
Labels : 8
Tunnel restriction code : (E)
Environmentally hazardous : no

IATA

UN number : 1760
Description of the goods : Corrosive liquid, n.o.s. Potassium Hydroxide
Class : 8
Packing group : III
Labels : 8

IATA_C

Packing instruction (cargo aircraft) : 856
Packing instruction (LQ) : Y841
Maximum quantity : 60.00 L
Environmentally hazardous : no

IATA_P

Packing instruction (passenger aircraft) : 852
Packing instruction (LQ) : Y841
Maximum quantity : 5.00 L
Environmentally hazardous : no

IMDG

UN number : 1760
Description of the goods : CORROSIVE LIQUID, N.O.S. Potassium Hydroxide
Class : 8
Packing group : III
Labels : 8
EmS Number 1 : F-A
EmS Number 2 : S-B
Marine pollutant : no

RID

UN number : 1760
Description of the goods : CORROSIVE LIQUID, N.O.S. Potassium Hydroxide
Transport hazard class(es) : 8
Packing group : III
Classification Code : C9
Hazard Identification Number : 80
Labels : 8
Limited Quantity (LQ) Inner : 5.00 L
Packaging
Maximum quantity : 30.00 KG

Environmentally hazardous : no

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

hebrochemie



Impulse für Mensch und Umwelt

XA005-K60 hebro®HB-300 RH

Version: 1.7

Revision Date 09.11.2013

Print Date 24.12.2014

SECTION 15: Regulatory information

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

Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws. Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
R22	Harmful if swallowed.
R34	Causes burns.
R35	Causes severe burns.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.

Full text of H-Statements referred to under sections 2 and 3.

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Full text of Notas referred to under section 3

Further 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.