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

1.1 Product identifier

Trade name : B003-K10 hebro®phos C

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

Use of the Substance/Mixture : Cleaner 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 : 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 :

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:

Orthophosphoric acid
Sulphuric acid
Isotridecanol, ethoxylated (7-<15 EO)

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 : Water based acid cleaner with anionic and nonionic surfactants.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Orthophosphoric acid	7664-38-2 231-633-2 01-2119485924-24	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 ——— specific concentration limit Skin Corr. 1B; H314 >= 25 %	>= 25 - < 50

		Skin Irrit. 2; H315 10 - < 25 % Eye Irrit. 2; H319 10 - < 25 %	
Sulphuric acid	7664-93-9 231-639-5 016-020-00-8 01-2119458838-20	Skin Corr. 1A; H314 Eye Dam. 1; H318 Aquatic Chronic 3; H412 ——— specific concentration limit Skin Corr. 1A; H314 >= 15 % Skin Irrit. 2; H315 5 - < 15 % Eye Irrit. 2; H319 5 - < 15 %	>= 5 - < 10
Isotridecanol, ethoxylated (7-<15 EO)	69011-36-5 500-241-6	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 2.5 - < 3

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 eye irritation persists, consult a specialist.

If swallowed : Rinse mouth with 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 Carbon dioxide (CO2) Dry powder Water mist
Unsuitable extinguishing media	:	High volume water 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.
Hazardous combustion products	:	Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.
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. Avoid contact with skin, eyes and clothing.

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 up mechanically and dispose according to local regulations. Neutralize with lime milk or soda and flush with plenty of wa-

ter.
Contaminated surfaces will be extremely slippery.

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 : Product is used in dilutions with water
Have eye wash bottle or eye rinse ready at the work place.
Avoid contact with skin and eyes.

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 : Keep only in the original container. Plastic container Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Protect from frost.

Advice on common storage : Incompatible with bases.

Recommended storage temperature : 5 - 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
Orthophosphoric acid	7664-38-2	TWA	1 mg/m3	GB EH40
		STEL	2 mg/m3	GB EH40
Sulphuric acid	7664-93-9	TWA (Mist, thoracic fraction)	0.05 mg/m3	GB EH40

8.2 Exposure controls

Personal protective equipment

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

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.
Skin and body protection	:	Long sleeved clothing Chemical resistant apron
Respiratory protection	:	Use respirator when performing operations involving potential exposure to vapour of the product.
Protective measures	:	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
	:	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
Auto-ignition temperature	:	not determined
pH	:	1.8 (20 °C) Concentration: 10 g/l
Viscosity		
Viscosity, dynamic	:	1.1 mPa*s (20 °C)

Viscosity, kinematic	:	similar to water
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.
Density	:	1.37 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 decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid	:	Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid	:	Bases

10.6 Hazardous decomposition products

No data available

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: 1,061 mg/kg Method: Calculation method

Components:

Orthophosphoric acid:

Acute oral toxicity	:	LD50 (Rat): > 300 mg/kg Method: OECD Test Guideline 423

Sulphuric acid:

Acute oral toxicity	:	LD50 (Rat): 2,140 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): 375 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks	:	No data available

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks	:	No data available

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

Product:

Remarks	:	This information is not available.

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.

11.2 Information on other hazards

Further information

Product:

Remarks	:	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

Components:

Orthophosphoric acid:

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 NOEC (Desmodesmus subspicatus (green algae)): 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

Sulphuric acid:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 16 - 28 mg/l Exposure time: 96 h
Toxicity to daphnia and other	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l

aquatic invertebrates		Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	IC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201

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:

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.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Dispose of in accordance with local regulations. Do not let product enter drains. Do not dispose of with domestic refuse.
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 1760
RID	:	UN 1760
IMDG	:	UN 1760
IATA	:	UN 1760

14.2 UN proper shipping name

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

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	:	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	:	Acids, Clear of living quarters.

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

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

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

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.

H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Skin Corr.	:	Skin corrosion
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
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: **Classification procedure:**

Met. Corr. 1	H290	Based on product data or assessment
Acute Tox. 4	H302	Calculation method
Skin Corr. 1	H314	Based on product data or assessment
Eye Dam. 1	H318	Based on product data or assessment

GB / EN