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

1.1 Product identifier

Trade name : A153-K21 hebro®lan SRA 80

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.
Skin irritation, Category 2	H315: Causes skin irritation.
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.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements : **Prevention:**

P234 Keep only in original packaging.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P390 Absorb spillage to prevent material damage.

Hazardous components which must be listed on the label:

Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether

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

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Tetrapotassium pyrophosphate	7320-34-5 230-785-7 01-2119489369-18	Eye Irrit. 2; H319	>= 2.5 - < 10
Potassium octanoate	764-71-6 212-130-7	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 2.5 - < 10
Potassium carbonate	584-08-7 209-529-3 01-2119532646-36	Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	>= 2.5 - < 10

Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether	68154-99-4	Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 3 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Remove from exposure, lie down.
Keep at rest.
Provide fresh air.
Take off contaminated clothing and shoes immediately.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : After contact with skin, wash immediately with plenty of water.
Take off all contaminated clothing immediately.

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 : Immediately give large quantities of water to drink.
Prevent vomiting if possible.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : irritant effects
corrosive effects

Causes skin irritation.
Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : The product itself does not burn.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry powder
Water spray jet

Unsuitable extinguishing : High volume water jet

media

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	Combustion may cause:
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	:	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	:	Handle in accordance with good industrial hygiene and safety practice.

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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Avoid contact with skin and eyes. Ensure adequate ventilation. Avoid formation of aerosol. For personal protection see section 8. Have eye wash bottle or eye rinse ready at the work place.
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 only in the original container at temperature not exceeding 50°C.

Further information on storage conditions : Protect from frost, heat and sunlight.

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

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Tetrapotassium pyrophosphate	Workers	Inhalation	Long-term systemic effects	2.79 mg/m3
Pentasodium triphosphate	Workers	Inhalation	Long-term systemic effects	0.661 mg/m3
	Workers	Inhalation	Acute systemic effects	0.661 mg/m3
	Workers	Skin contact	Long-term systemic effects	0.375 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	0.375 mg/kg bw/day
Potassium carbonate	Workers	Inhalation	Long-term local effects	10 mg/m3
	Workers	Skin contact	Long-term local effects	16 mg/cm2

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

Substance name	Environmental Compartment	Value
Tetrapotassium pyrophosphate	Fresh water	0.05 mg/l
	Marine water	0.005 mg/l
	Sewage treatment plant	50 mg/l
Pentasodium triphosphate	Fresh water	0.005 mg/l
	Marine water	0.005 mg/l
	Fresh water sediment	0.19 mg/kg
	Soil	0.14 mg/kg

8.2 Exposure controls

Personal protective equipment

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

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
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
Respiratory protection	:	not required under normal use Use respirator when performing operations involving potential exposure to vapour of the product. Recommended Filter type: ABEK-filter
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	:	characteristic
Melting point/freezing point	:	not determined
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Auto-ignition temperature	:	not determined

pH	:	10 (20 °C) Concentration: 10 g/l
Viscosity		
Viscosity, kinematic	:	similar to water
Flow time	:	12 sec. at 20 °C Cross section: 4 mm Method: DIN 53211
Solubility(ies)		
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	Not applicable
Vapour pressure	:	not determined
Density	:	1.28 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

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

Carbon dioxide (CO2)
Carbon monoxide
Smoke
Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified due to lack of data.

Product:

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

Tetrapotassium pyrophosphate:

Acute oral toxicity : LD50 (Rat, male): 2,440 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 1.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402

Potassium carbonate:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4.96 mg/l
Exposure time: 4.5 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether:

Acute oral toxicity : LD50 (Rat, male): 2,414 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 7.1 mg/l
Exposure time: 1 h

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Method: estimated

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks : Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : 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.

Product:

Remarks : No sensitising effects are known.

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

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),

Further information

Product:

Remarks : Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Tetrapotassium pyrophosphate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : (Desmodesmus subspicatus): > 100 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Bacteria): > 1,000 mg/l
Exposure time: 3 h

Potassium carbonate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 68 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia pulex (Water flea)): 200 mg/l
Exposure time: 48 h

Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 6.3 mg/l
Exposure time: 48 h
Test Type: Immobilization

Toxicity to microorganisms : IC50 (Bacteria): 4,900 mg/l
Exposure time: 16 h

12.2 Persistence and degradability

Components:

Alcohols, C8-10, ethers with polyethylene-polypropylene glycol monobenzyl ether:

Biodegradability : Biodegradation: > 60 %

Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: rapidly biodegradable
The surfactant(s) contained in this mixture complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.907/2006 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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

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.

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	:	If recycling is not practicable, dispose of in compliance with local regulations.

Since emptied containers retain product residues (vapour and/or liquid) follow all MSDS/label warnings after container is emptied.

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 3267

RID : UN 3267

IMDG : UN 3267

IATA : UN 3267

14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium octanoate)

RID : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium octanoate)

IMDG : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Potassium octanoate)

IATA : Corrosive liquid, basic, organic, n.o.s. (Potassium octanoate)

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADR	8	
RID	8	
IMDG	8	
IATA	8	

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	C7
Hazard Identification Number	:	80
Labels	:	8
Tunnel restriction code	:	(E)

RID

Packing group	:	III
Classification Code	:	C7
Hazard Identification Number	:	80
Labels	:	8

IMDG

Packing group	:	III

Labels	:	8
EmS Code	:	F-A, S-B
Remarks	:	Alkalis, Clear of living quarters., Separated from acids.

IATA (Cargo)

Packing instruction (cargo aircraft)	:	856
Packing instruction (LQ)	:	Y841
Packing group	:	III
Labels	:	Corrosives

IATA_P (Passenger)

Packing instruction (passenger aircraft)	:	852
Packing instruction (LQ)	:	Y841
Packing group	:	III
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

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 when it is used in the specified applications.

SECTION 16: Other information

Full text of H-Statements

H312	:	Harmful in contact with skin.
H315	:	Causes skin irritation.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H335	:	May cause respiratory irritation.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation
STOT SE	:	Specific target organ toxicity - single exposure

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 Re-

striction 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.

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.
Guideline on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) : no component is listed
No PFAS are consciously added to the product concerning the restriction proposal for inclusion to REACh (Annex XVII).

Classification of the mixture:		**Classification procedure:**
Met. Corr. 1	H290	Based on product data or assessment
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method

GB / EN