according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Trade name : F205-K21 hebro®pure OK

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

Contact person Telephone

Telefax

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 : Zentrale hebro chemie : +49 (0) 2166 6009-0 : +49 (0) 2166 6009-99

Contact person product safety
Telephone
E-mail address

Abteilung Produktsicherheit
+49(0)2166 6009-311

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)

Skin irritation, Category 2 H315: Causes skin irritation.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Corrosive to metals, Category 1 H290: May be corrosive to metals.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

TZ.

Signal word : Danger

Hazard statements : H290 May be corrosive to metals.

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H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary statements : Prevention:

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/ doctor. P332 + P313 If skin irritation occurs: Get medical advice/

attention.

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.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

corrosion protection

Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	(REGULATION (EC)	(% w/w)
	Registration number	No 1272/2008)	
Tetrapotassium pyrophosphate	7320-34-5	Eye Irrit. 2; H319	>= 3 - < 10
	230-785-7		
	01-2119489369-18		
Potassium octanoate	764-71-6	Eye Irrit. 2; H319	>= 5 - < 10
	212-130-7	Skin Irrit. 2; H315	
Potassium carbonate	584-08-7	Eye Irrit. 2; H319	>= 5 - < 10
	209-529-3	STOT SE 3; H335	
	01-2119532646-36	Skin Irrit. 2; H315	
Alcohols, C8-10, ethers with poly-	68154-99-4	Acute Tox. 4; H312	>= 3 - < 5
ethylene-polypropylene glycol		Skin Irrit. 2; H315	
monobenzyl ether		Eye Dam. 1; H318	

For explanation of abbreviations see section 16.

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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 contaminated clothing and shoes immediately.

If symptoms persist, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse imme-

diately with plenty of water, also under the eyelids, for at least

15 minutes.

Seek medical treatment when symptoms develop due to con-

tact with eyes.

If eye irritation persists, consult a specialist.

If swallowed : Call a physician immediately.

Keep patient warm and at rest.

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

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 cir-

cumstances and the surrounding environment.

Alcohol-resistant foam 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- : Combustion may cause:

according to Regulation (EC) No. 1907/2006

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fighting Carbon dioxide (CO2)

Carbon monoxide

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Prevent fire extinguishing water from contaminating surface

water or the ground water system.

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 envi-

ronment 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

See chapter

8

and

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.

When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Follow the water regulations. 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 stor- : Keep away from heat. Keep away from food, drink and animal

according to Regulation (EC) No. 1907/2006

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age conditions feedingstuffs. Keep at temperatures between 5°C and 45°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

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 ef-	Value
			fects	
Tetrapotassium pyro-	Workers	Inhalation	Long-term systemic	2.79 mg/m3
phosphate			effects	
Potassium carbonate	Workers	Inhalation	Long-term local ef-	10 mg/m3
			fects	
	Workers	Skin contact	Long-term local ef-	16 mg/cm2
			fects	

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

8.2 Exposure controls

Personal protective equipment

Eye protection : Face-shield

Safety glasses with side-shields conforming to EN166

Hand protection

Material : Chemical resistant gloves made of butyl rubber or nitrile rub-

ber 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

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 : Follow the skin protection plan.

according to Regulation (EC) No. 1907/2006

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : 10 (20 °C)

Concentration: 10 g/l

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 1.28 g/cm³ (20 °C)

Method: DIN 51757

Solubility(ies)

Water solubility : completely soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Flow time : 12 sec. at 20 °C

according to Regulation (EC) No. 1907/2006

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Cross section: 4 mm Method: DIN 53211

Explosive properties : No data available

Oxidizing properties : No data available

9.2 Other information

Metal corrosion rate : May be corrosive to metals.

Other physico-chemical properties: This information is not available/not determined.

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

No decomposition if stored and applied as directed.

In case of fire hazardous decomposition products may be produced such as:

Carbon dioxide (CO2)

Carbon monoxide

Smoke

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

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

Method: Calculation method

Acute toxicity

Components:

Tetrapotassium pyrophosphate:

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

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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: > 4.96 mg/l

Exposure time: 4.5 h

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

Product:

Remarks: Causes skin irritation.

Serious eye damage/eye irritation

Product:

Remarks: Causes serious eye damage.

Respiratory or skin sensitisation

Product:

Remarks: No sensitising effects are known.

Germ cell mutagenicity

Product:

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

Carcinogenicity

Product:

Carcinogenicity - Assess- : Not classifiable as a human carcinogen.

ment

Reproductive toxicity

Product:

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

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STOT - single exposure

Product:

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

STOT - repeated exposure

Product:

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

Aspiration toxicity

Product:

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

Further information

Product:

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

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology studies for the product are not available.

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

(Desmodesmus subspicatus): > 100 mg/l Toxicity to algae

Exposure time: 72 h

Test Type: Growth inhibition Method: OECD Test Guideline 201

EC50 (Bacteria): > 1,000 mg/l Toxicity to microorganisms

Exposure time: 3 h

Potassium carbonate:

LC50 (Oncorhynchus mykiss (rainbow trout)): 68 mg/l Toxicity to fish

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia pulex (Water flea)): 200 mg/l

Exposure time: 48 h

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

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Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 6.3 mg/l

Exposure time: 48 h Test Type: Immobilization

IC50 (Bacteria): 4,900 mg/l Toxicity to microorganisms

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 Other adverse effects

Product:

mation

Additional ecological infor- : 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

according to Regulation (EC) No. 1907/2006

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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 : 07 06 01 : aqueous washing liquids and mother liquors

SECTION 14: Transport information

14.1 UN 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.

(Tetrapotassium pyrophosphate solution, Potassium car-

bonate)

RID : CORROSIVE LIQUID, N.O.S.

(Tetrapotassium pyrophosphate solution, Potassium car-

bonate)

IMDG : CORROSIVE LIQUID, N.O.S.

(Tetrapotassium pyrophosphate solution, Potassium car-

bonate)

IATA : Corrosive liquid, n.o.s.

(Tetrapotassium pyrophosphate solution, Potassium car-

bonate)

14.3 Transport hazard class(es)

 ADR
 : 8

 RID
 : 8

 IMDG
 : 8

 IATA
 : 8

14.4 Packing group

ADR

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

RID

Packing group : III Classification Code : C9

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Hazard Identification Number : 80 Labels : 8

IMDG

Packing group : III Labels : 8

EmS Code : F-A, S-B

Remarks : Alkalis, Clear of living quarters.

IATA (Cargo)

Packing instruction (cargo : 856

aircraft)

Packing instruction (LQ) : Y841
Packing group : III

Labels : Corrosive

IATA (Passenger)

Packing instruction (passen: 852

ger aircraft)

Packing instruction (LQ) : Y841
Packing group : III

Labels : Corrosive

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

Refer to protective measures listed in sections 7 and 8.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High : Not applicable

Concern for Authorisation (Article 59).

Regulation (EC) No 1005/2009 on substances that de- : Not applicable

plete the ozone layer

Regulation (EC) No 850/2004 on persistent organic pol: Not applicable

lutants

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 imple-

ment all hazard classes and categories.

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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 - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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; 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

according to Regulation (EC) No. 1907/2006

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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.

GB/EN