

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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

1.1 Product identifier

Trade name : M054-W30 hebro®Serve K (Paste) (25kg)

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

Use of the Sub-
stance/Mixture : Pickle for ferrous metals

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, Sub-category 1B	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 :



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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: P260 Do not breathe dust. 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.

Hazardous components which must be listed on the label:

Orthophosphoric acid

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 : Preparation based on phosphoric acid

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	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318	>= 50 - < 65

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

		specific concentration limit Skin Corr. 1B; H314 >= 25 % Skin Irrit. 2; H315 10 - < 25 % Eye Irrit. 2; H319 10 - < 25 %	
Substances with a workplace exposure limit :			
Silicon dioxide	112945-52-5 231-545-4 01-2119379499-16		>= 2.5 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : First aider needs to protect himself.
Move out of dangerous area.
- 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 water.
If symptoms persist, call a physician.
- 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 : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Call a physician immediately.

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : The product is not flammable.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific extinguishing methods : Use water spray to cool unopened containers.

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 : 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.
Suitable material for dilution or neutralization

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 : 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.

Advice on protection against : Normal measures for preventive fire protection.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

fire and explosion

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep only in the original container. Plastic 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) : Pickle for ferrous metals

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/m ³	GB EH40
		STEL	2 mg/m ³	GB EH40
Silicon dioxide	112945-52-5	TWA (inhalable dust)	6 mg/m ³ (Silica)	GB EH40
		TWA (Respirable dust)	2.4 mg/m ³ (Silica)	GB EH40

8.2 Exposure controls

Personal protective equipment

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

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

	can be obtained from the protective glove producer and this has to be observed.
Skin and body protection	: Chemical resistant protective clothing according to DIN EN 13034 (Type 6) Long sleeved clothing Chemical resistant apron
Respiratory protection	: If product forms vapours or aerosols wear breathing protection.
Filter type	: Combined particulates, acidic gas/vapour and organic vapour type (AE-P)
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	: paste
Colour	: blue
Odour	: characteristic
	: not determined
Upper explosion limit / Upper flammability limit	: Not applicable
Lower explosion limit / Lower flammability limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
pH	: 1.7 (20 °C) Concentration: 10 g/l
Viscosity Viscosity, kinematic	: Not applicable

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

Solubility(ies)
Water solubility : 1,000 g/l completely soluble

Partition coefficient: n-
octanol/water : Not applicable

Vapour pressure : Not applicable

Density : 1.5 g/cm³ (20 °C)
Method: DIN 51757

Bulk density : not determined

Relative vapour density : Not applicable

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 : No data available 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 dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid : Bases

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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: 774.61 mg/kg
Method: Calculation method

Components:

Orthophosphoric acid:

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

Silicon dioxide:

Acute oral toxicity : LD50 (Rat): > 10,000 mg/kg
Remarks: Information taken from reference works and the literature.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Remarks: Information taken from reference works and the literature.

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

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.

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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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 : 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

Silicon dioxide:

Toxicity to fish : LC50 (Brachydanio rerio (Zebra danio)): > 10,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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

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 : 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.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 3244
RID : UN 3244
IMDG : UN 3244
IATA : UN 3244

14.2 UN proper shipping name

ADR :
(Orthophosphoric acid)
RID :
(Orthophosphoric acid)
IMDG :
(Orthophosphoric acid)
IATA :
(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 : C10
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

RID
Packing group : II
Classification Code : C10
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) : 863

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

Packing instruction (LQ) : Y844
Packing group : II
Labels : Corrosives

IATA_P (Passenger)

Packing instruction (passenger aircraft) : 859
Packing instruction (LQ) : Y844
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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : 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

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)



A brand of BASF – we create chemistry

Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of H-Statements

H290	:	May be corrosive to metals.
H302	:	Harmful if swallowed.
H314	:	Causes severe skin burns and eye damage.
H318	:	Causes serious eye damage.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Eye Dam.	:	Serious eye damage
Met. Corr.	:	Corrosive to metals
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; AIIIC - 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 - 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by
Commission Regulation (EU) 2020/878

M054-W30 hebro®Serve K (Paste) (25kg)



Version: 3.9

Revision Date: 13.09.2024

Print Date: 14.09.2024

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:

Met. Corr. 1	H290
Acute Tox. 4	H302
Skin Corr. 1B	H314
Eye Dam. 1	H318

Classification procedure:

Based on product data or assessment
Calculation method
Calculation method
Calculation method

GB / EN