

SAFETY DATA SHEET

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



Hakaphos 3-15-36

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	19.11.2024	M0168	Date of first issue: 19.11.2024

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

1.1 Product identifier

Trade name : Hakaphos 3-15-36

Unique Formula Identifier (UFI) : V6K5-10Y3-M00F-2SQS

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

Use of the Sub-
stance/Mixture : Fertiliser

1.3 Details of the supplier of the safety data sheet

Company : COMPO EXPERT GmbH
Krögerweg 10
D-48155 Münster

Telephone : +49 (0) 251 29 79 81 – 000

Telefax : +49 (0) 251 29 79 81 - 111

E-mail address of person
responsible for the SDS : info@compo-expert.com

1.4 Emergency telephone number

GBK GmbH - Global Regulatory Compliance - 24h
Telephone: +49 (0) 6132 - 84463

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.
Eye irritation, Category 2	H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



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Signal word : Warning

Hazard statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

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: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Inorganic fertiliser

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
potassium hydrogensulphate	7646-93-7 231-594-1 016-056-00-4 01-2119489441-34-XXXX	Skin Corr. 1B; H314 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)	>= 1 - < 3

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 | : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended. |
| Protection of first-aiders | : First Aid responders should pay attention to self-protection and use the recommended protective clothing
If potential for exposure exists refer to Section 8 for specific personal protective equipment. |
| If inhaled | : If breathed in, move person into fresh air.
If symptoms persist, call a physician. |
| In case of skin contact | : Wash off with soap and water. |
| In case of eye contact | : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If eye irritation persists, consult a specialist. |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water.
Obtain medical attention. |

4.2 Most important symptoms and effects, both acute and delayed

- | | |
|----------|---|
| Symptoms | : Ingestion may provoke the following symptoms:
Methaemoglobinemia |
| Risks | : Causes skin irritation.
Causes serious eye irritation. |

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 | : Water
Dry chemical
Water mist
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media | : High volume water jet
Carbon dioxide (CO ₂) |

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Foam
Sand

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Thermal decomposition can lead to release of irritating gases and vapours.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Nitrogen oxides (NO_x)
Carbon oxides

5.3 Advice for firefighters

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

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
The product itself does not burn.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Avoid contact with skin, eyes and clothing.
Wash contaminated clothing before re-use.
Avoid breathing dust.
For personal protection see section 8.
For disposal considerations see section 13.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- | | | |
|---|---|---|
| Advice on safe handling | : | Avoid contact with skin and eyes.
Wear personal protective equipment.
Keep away from combustible material.
Keep away from heat and sources of ignition.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations. |
| Advice on protection against fire and explosion | : | The product is not flammable. |
| Hygiene measures | : | Keep away from food, drink and animal feedingstuffs. Wash hands before eating, drinking, or smoking. Wash hands before breaks and at the end of workday. |

7.2 Conditions for safe storage, including any incompatibilities

- | | | |
|---|---|---|
| Further information on storage conditions | : | Keep away from sources of ignition - No smoking. Keep away from direct sunlight. Protect from moisture. |
| Advice on common storage | : | Keep away from combustible materials.
Keep away from strong acids.
Keep away from strong bases.
Keep away from food, drink and animal feedingstuffs. |
| Storage class (TRGS 510) | : | 13 |
| Further information on storage stability | : | Protect from frost, heat and sunlight. |

7.3 Specific end use(s)

- | | | |
|-----------------|---|--------------|
| Specific use(s) | : | Not relevant |
|-----------------|---|--------------|

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

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

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Hand protection	
Material	: Gloves
Directive	: Equipment should conform to EN 374
Remarks	: As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.
Skin and body protection	: Long sleeved clothing
Respiratory protection	: In the case of dust or aerosol formation use respirator with an approved filter. Equipment should conform to EN 14387
Filter type	: Filter type P
Protective measures	: Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before re-use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: solid
Colour	: red brown
Odour	: none
Melting point/range	: not determined
Boiling point/boiling range	: not determined
Flammability	: Will not burn
Upper explosion limit / Upper flammability limit	: Not applicable
Lower explosion limit / Lower flammability limit	: Not applicable
Flash point	: Not applicable

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Auto-ignition temperature : does not ignite

Decomposition temperature : > 130 °C
To avoid thermal decomposition, do not overheat.

pH : ca. 2,7 (20 °C)
Concentration: 100 g/l

Solubility(ies)
Water solubility : soluble

Partition coefficient: n-octanol/water : Not applicable

Density : not determined

Bulk density : ca. 1.310 kg/m³

Particle characteristics
Particle Size Distribution : D50 = 230 µm ± 50 µm
Measurement technique: Sieve analysis

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

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Hazardous reactions : None reasonably foreseeable.
Heating can release hazardous gases.

10.4 Conditions to avoid

Conditions to avoid : Hot surface(s)
Direct sources of heat.

10.5 Incompatible materials

Materials to avoid : Strong bases
Organic materials
Strong acids
Powdered metals

10.6 Hazardous decomposition products

Hazardous decomposition products : Sulphur oxides
Oxides of phosphorus
Nitrogen oxides (NO_x)

SECTION 11: Toxicological information

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

Acute toxicity

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

Components:

potassium hydrogensulphate:

Acute oral toxicity : Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : Assessment: The substance or mixture has no acute dermal toxicity

Skin corrosion/irritation

Causes skin irritation.

Components:

potassium hydrogensulphate:

Assessment : Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye irritation.

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Components:

potassium hydrogensulphate:

Assessment : Risk of serious damage to eyes.

Respiratory or skin sensitisation

Skin sensitisation

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

Respiratory sensitisation

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

Components:

potassium hydrogensulphate:

Assessment : Does not cause skin sensitisation.

Assessment : Does not cause respiratory sensitisation.

Germ cell mutagenicity

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

Components:

potassium hydrogensulphate:

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

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

Components:

potassium hydrogensulphate:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Reproductive toxicity

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

Components:

potassium hydrogensulphate:

Reproductive toxicity - Assessment : No toxicity to reproduction

No effects on or via lactation

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STOT - single exposure

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

Components:

potassium hydrogensulphate:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

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

Components:

potassium hydrogensulphate:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

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

Components:

potassium hydrogensulphate:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Components:

potassium hydrogensulphate:

Partition coefficient: n- : Remarks: Not applicable

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octanol/water

12.4 Mobility in soil

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.

Components:

potassium hydrogensulphate:

Assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	: Do not flush into surface water or sanitary sewer system. Dispose of in accordance with local regulations. Waste codes should be assigned by the user based on the application for which the product was used.
Contaminated packaging	: Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers retain residue and can be dangerous.

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SECTION 14: Transport information

14.1 UN number or ID number

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA_P	: Not regulated as a dangerous good

14.2 UN proper shipping name

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA_P	: Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA_P	: Not regulated as a dangerous good

14.4 Packing group

ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
IATA (Cargo)	: Not regulated as a dangerous good
IATA_P (Passenger)	: Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Regulatory basis	: IMSBC Code
Remarks	: Product is not allowed to be transported in bulk.

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SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

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

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors

This product is regulated by Regulation (EU) 2019/1148: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. potassium nitrate (ANNEX II)

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable

Water hazard class (Germany) : WGK 1 slightly hazardous to water
Classification according to AwSV, Annex 1 (5.2)

15.2 Chemical safety assessment

Not relevant

SECTION 16: Other information

Full text of H-Statements

H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H335	: May cause respiratory irritation.

Full text of other abbreviations

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Eye Dam.	:	Serious eye damage
Skin Corr.	:	Skin corrosion
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 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

Classification of the mixture:

Skin Irrit. 2	H315
Eye Irrit. 2	H319

Classification procedure:

Calculation method
Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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