According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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

1.1 Product identifier

Trade name : thermosept® RKF

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

Use of the Sub- : Cleaning agent

stance/Mixture

Recommended restrictions : For professional users only.

on use

1.3 Details of the supplier of the safety data sheet

Producer : Schülke & Mayr GmbH

Robert-Koch-Str. 2

22851 Norderstedt

Germany

Telephone: +49 (0)40/ 52100-0 Telefax: +49 (0)40/ 52100318

mail@schuelke.com www.schuelke.com

Supplier : Schülke & Mayr UK Ltd.

Cygnet House

1, Jenkin Road, Meadowhall

Sheffield S9 1AT United Kingdom

Telephone: +44 114 254 35 00 Telefax: +44 114 254 35 01 mail.uk@schulke.com

E-mail address of person

responsible for the +49 (0)<sup>4</sup> SDS/Contact person AD@sc

Application Specialists +49 (0)40/ 521 00 666 AD@schuelke.com

(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone num-

Carechem 24 International:+44 1235 239670

ber

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)

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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) as amended by The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019)

Hazard pictograms :

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

Precautionary statements : Prever

Prevention:

P280 Wear protective gloves (e.g. butyl rubber) /protective

clothing/eye protection/face 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 or show-

er.

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.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Hazardous components which must be listed on the label:

potassium hydroxide

## 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.

Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

Vapours may cause irritation to the eyes, respiratory system and the skin.

# **SECTION 3: Composition/information on ingredients**

# 3.2 Mixtures

Chemical nature : Solution of the following substances with harmless additives.

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## Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
potassium hydroxide	1310-58-3 215-181-3 019-002-00-8 01-2119487136-33- XXXX	Met. Corr. 1; H290 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 ————————————————————————————————————	>= 3 - < 5

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : Move to fresh air.

If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with plenty of water for at least 15

minutes.

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.

Obtain medical attention.

If swallowed : Do NOT induce vomiting.

Rinse mouth with water.

Give small amounts of water to drink.

Obtain medical attention.

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4.2 Most important symptoms and effects, both acute and delayed

: corrosive effects **Symptoms** 

Risks : Causes serious eye damage.

Causes severe burns.

4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** For specialist advice physicians should contact the Poisons

Information Service.

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

Suitable extinguishing media Water spray jet

> Dry powder Foam

Carbon dioxide (CO2)

Unsuitable extinguishing

media

Do NOT use water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: Gives off hydrogen by reaction with metals.

ucts

Hazardous combustion prod- : No hazardous combustion products are known

5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

**SECTION 6: Accidental release measures** 

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment.

Avoid contact with skin and eyes.

6.2 Environmental precautions

Environmental precautions Avoid subsoil penetration.

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up Wipe up with absorbent material (e.g. cloth, fleece).

Soak up with inert absorbent material (e.g. sand, silica gel,

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acid binder, universal binder, sawdust).

#### 6.4 Reference to other sections

see Section 8 + 13

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Advice on safe handling : Wear personal protective equipment.

Avoid contact with skin, eyes and clothing.

Advice on protection against

fire and explosion

No special protective measures against fire required. The

product is not flammable.

Hygiene measures : Keep away from food and drink.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

Store at room temperature in the original container.

Further information on stor-

age conditions

Keep away from heat. Keep away from direct sunlight. Keep

container tightly closed. Recommended storage temperature:

5 - 25°C

Advice on common storage : Do not store near acids.

7.3 Specific end use(s)

Specific use(s) : none

## **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
potassium hydrox- ide	1310-58-3	STEL	2 mg/m3	GB EH40

## **Derived No Effect Level (DNEL):**

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
potassium hydroxide	Workers	Inhalation	Long-term local effects	1 mg/m3

## 8.2 Exposure controls

## **Engineering measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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

Hand protection

Directive : The selected protective gloves have to satisfy the specifica-

tions of Regulation (EU) 2016/425 and the standard EN 374

derived from it.

Remarks : Splash protection: disposable nitrile rubber gloves e.g.

Dermatril (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatril (>480 Min., layer thickness: 0,40 mm) or butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protec-

tion.

Skin and body protection : Choose body protection according to the amount and concen-

tration of the dangerous substance at the work place.

Chemical resistant apron

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

Protective measures : Avoid contact with skin and eyes.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless, -, yellow

Odour : characteristic

Odour Threshold : not determined

pH : 14 (20 °C)

Concentration: 100 %

Melting point/freezing point : < -5 °C

Decomposition temperature Not applicable

Boiling point/boiling range : ca. 100 °C

Flash point : > 100 °C

Method: ISO 2719

Evaporation rate : No data available

Upper explosion limit / Upper

flammability limit

Not applicable

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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Lower explosion limit / Lower

flammability limit

Not applicable

Vapour pressure : ca. 25 hPa (20 °C)

Relative vapour density : No data available

Density : 1.12 - 1.13 g/cm3 (20 °C)

Solubility(ies)

Water solubility : completely soluble (20 °C)

Partition coefficient: n-

octanol/water

Not applicable

Auto-ignition temperature : No data available

Viscosity

Viscosity, dynamic : ca. 3 mPa\*s

Method: ISO 3219

Explosive properties : No data available

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

9.2 Other information

Flammability (liquids) : Does not sustain combustion.

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

# 10.2 Chemical stability

The product is chemically stable.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : reaction with acids.

Possible incompatibility with alkali sensitive materials.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : Acids

Ammonium salts

#### 10.6 Hazardous decomposition products

None reasonably foreseeable.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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# **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

#### **Acute toxicity**

Not classified based on available information.

**Product:** 

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

Method: Calculation method

**Components:** 

potassium hydroxide:

Acute oral toxicity : LD50 (Rat): 365 mg/kg

Method: OECD Test Guideline 425 Assessment: Harmful if swallowed.

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Causes severe burns.

**Components:** 

potassium hydroxide:

Species : reconstructed human epidermis (RhE)

Method : OECD Test Guideline 431

Result : Corrosive after 3 minutes or less of exposure

Serious eye damage/eye irritation

Causes serious eye damage.

**Components:** 

potassium hydroxide:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

**Components:** 

potassium hydroxide:

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> Species Guinea pig

Result Did not cause sensitisation on laboratory animals.

# Germ cell mutagenicity

Not classified based on available information.

## **Components:**

## potassium hydroxide:

Genotoxicity in vitro Test Type: Microbial mutagenesis assay (Ames test)

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

sessment

Germ cell mutagenicity- As- : Animal testing did not show any mutagenic effects.

## Carcinogenicity

Not classified based on available information.

#### **Components:**

# potassium hydroxide:

Carcinogenicity - Assess-: No data available

ment

#### Reproductive toxicity

Not classified based on available information.

## **Components:**

#### potassium hydroxide:

Reproductive toxicity - As-: No data available

sessment

## STOT - single exposure

Not classified based on available information.

# Components:

# potassium hydroxide:

The substance or mixture is not classified as specific target Assessment

organ toxicant, single exposure.

# STOT - repeated exposure

Not classified based on available information.

## **Components:**

# potassium hydroxide:

Assessment The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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**Aspiration toxicity** 

Not classified based on available information.

**Further information** 

**Product:** 

Remarks No data is available on the product itself.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

## **Components:**

potassium hydroxide:

Toxicity to fish LC50 (Gambusia affinis (Mosquito fish)): 80 mg/l

> Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other : Remarks: No data available

aquatic invertebrates

Toxicity to algae/aquatic

plants

: Remarks: No data available

**Ecotoxicology Assessment** 

Chronic aquatic toxicity This product has no known ecotoxicological effects.

## 12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

**Components:** 

potassium hydroxide:

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

#### 12.3 Bioaccumulative potential

**Components:** 

potassium hydroxide:

Bioaccumulation Remarks: Does not bioaccumulate.

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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## 12.4 Mobility in soil

## **Components:**

potassium hydroxide:

Mobility : Remarks: Mobile in soils

#### 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:**

Endocrine disrupting poten-

tial

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.

Additional ecological infor-

mation

No data is available on the product itself.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special

disposal required according to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

# **SECTION 14: Transport information**

## 14.1 UN number

ADR : UN 1814 IMDG : UN 1814 IATA : UN 1814

14.2 UN proper shipping name

ADR : POTASSIUM HYDROXIDE SOLUTION

IMDG : POTASSIUM HYDROXIDE SOLUTION



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IATA : Potassium hydroxide solution

14.3 Transport hazard class(es)

 ADR
 : 8

 IMDG
 : 8

 IATA
 : 8

14.4 Packing group

**ADR** 

Packing group : II
Classification Code : C5
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

**IMDG** 

Packing group : II Labels : 8

EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo : 855

aircraft)

Packing instruction (LQ) : Y840
Packing group : II

Labels : Corrosive

IATA (Passenger)

Packing instruction (passen- : 851

ger aircraft)

Packing instruction (LQ) : Y840
Packing group : II

Labels : Corrosive

14.5 Environmental hazards

ADR

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 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

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the fol-

lowing 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 Brit-

ain)

: Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

UK REACH List of substances subject to authorisation

(Annex XIV)

Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control)

Not applicable

## Other regulations:

The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI : On the inventory, or in compliance with the inventory

# 15.2 Chemical safety assessment

Exempt

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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#### **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 / 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; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

## **Further information**

Classification of the mixture:

Classification procedure:

Skin Corr. 1B H314 Calculation method

According to REACH etc. (Amendment etc.) (EU Exit) Regulations 2019



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Eye Dam. 1 H318 Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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.