

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

schülke ->

thermosept® NKZ **No Change Service!**

Version
03.03

Revision Date:
28.09.2017

Date of last issue: 13.12.2016
Date of first issue: 07.09.2001

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

1.1 Product identifier

Trade name : thermosept® NKZ

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

Use of the Sub-
stance/Mixture : Additive

Recommended restrictions
on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : 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

E-mail address of person
responsible for the
SDS/Contact person : Application Department
+49 (0)40/ 521 00 8800
ADHI@schuelke.com
(Schülke & Mayr UK Ltd.: +44-1142543500)

1.4 Emergency telephone number

Emergency telephone num-
ber : UK Poisons Emergency number: 0870 600 6266

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1
Eye irritation, Category 2

H290: May be corrosive to metals.
H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

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Hazard statements : H290 May be corrosive to metals.
H319 Causes serious eye irritation.

Precautionary statements : P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.

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.
No special risks known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Citric acid monohydrate	5949-29-1 201-069-1 --- ---	Eye Irrit. 2; H319	30 - 50

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 : If breathed in, move person into fresh air.

In case of skin contact : Wash with water and soap as a precaution.
If symptoms persist, call a physician.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If eye irritation persists, consult a specialist.

If swallowed : Do NOT induce vomiting.
Drink water as a precaution.
If symptoms persist, call a physician.

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Symptoms : Treat symptomatically.

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	:	Dry powder Foam Water spray jet Carbon dioxide (CO ₂)
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Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.
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5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	No information available.
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Hazardous combustion products	:	Carbon dioxide (CO ₂) Carbon monoxide
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5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.
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SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Personal precautions	:	Use personal protective equipment.
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6.2 Environmental precautions

Environmental precautions	:	Avoid subsoil penetration.
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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, acid binder, universal binder, sawdust).
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6.4 Reference to other sections

see Section 8 + 13

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- Advice on safe handling : Never mix concentrates directly.
- Advice on protection against fire and explosion : No special protective measures against fire required.
- 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 storage conditions : Keep away from heat. Keep container tightly closed. Recommended storage temperature: 5 - 25°C
- Advice on common storage : No materials to be especially mentioned.

7.3 Specific end use(s)

- Specific use(s) : none

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

none

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

Substance name	Environmental Compartment	Value
Citric acid monohydrate	Fresh water	0,44 mg/l
	Marine water	0,044 mg/l
	Fresh water sediment	7,52 mg/kg
	Marine sediment	0,752 mg/kg
	Soil	29,2 mg/kg

8.2 Exposure controls**Personal protective equipment**

- Eye protection : Safety glasses with side-shields conforming to EN166
- Hand protection
Directive : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- Remarks : Splash protection: disposable nitrile rubber gloves e.g. Dermatrill (layer thickness: 0.11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Nitrile rubber gloves e.g. Camatrill (>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 protection.

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Respiratory protection : No personal respiratory protective equipment normally required.

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

Odour : nearly odourless

Odour Threshold : not determined

pH : ca. 2 (20 °C)

Melting point/freezing point : ca. 0 °C

Decomposition temperature : Not applicable

Boiling point/boiling range : ca. 100 °C

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit : Not applicable

Lower explosion limit : Not applicable

Vapour pressure : ca. 25 hPa (20 °C)

Vapour density : No data available

Relative density : ca. 1,17 g/cm³ (20 °C)

Solubility(ies)
Water solubility : in all proportions (20 °C)

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : No data available

Viscosity
Viscosity, dynamic : ca. 4 mPa*s
Method: ISO 3219

Explosive properties : No data available

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Oxidizing properties : Not applicable

9.2 Other information

Metal corrosion rate : > 6,25 mm/a
Corrosive to metals Aluminium and Mild steel

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 : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : Metals

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 10.000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate: > 50 mg/l
Acute dermal toxicity : Acute toxicity estimate: > 5.000 mg/kg

Skin corrosion/irritation

Components:

Citric acid monohydrate:

Rabbit, Mild skin irritation, Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Causes serious eye irritation., Calculation method

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Respiratory or skin sensitisation**Components:****Citric acid monohydrate:**

Does not cause skin sensitisation.OECD Test Guideline 406

Germ cell mutagenicity**Components:****Citric acid monohydrate:**

Germ cell mutagenicity- Assessment : Non mutagenic

Carcinogenicity**Components:****Citric acid monohydrate:**

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Reproductive toxicity**Components:****Citric acid monohydrate:**Effects on fertility : Rat, Oral, NOAEL: 2.500 mg/kg
Reproductive toxicity - Assessment : No toxicity to reproduction**STOT - single exposure****Components:****Citric acid monohydrate:**

|| No data available

STOT - repeated exposure**Components:****Citric acid monohydrate:**

|| No data available

Repeated dose toxicity**Components:****Citric acid monohydrate:**

Rat, NOAEL: 1.200 mg/kg, Oral

Aspiration toxicity

No data available

Further information**Product:**

No data is available on the product itself.

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Date of first issue: 07.09.2001**SECTION 12: Ecological information****12.1 Toxicity****Components:****Citric acid monohydrate:**

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 440 - 760 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other : EC50 (Daphnia magna): 85 - 120 mg/l
aquatic invertebrates Exposure time: 72 h
- Toxicity to algae : IC5 (Scenedesmus quadricauda (Green algae)): 640 mg/l

12.2 Persistence and degradability**Product:**

- Biodegradability : Result: Readily biodegradable.
Method: OECD 301D / EEC 84/449 C6
- Chemical Oxygen Demand : 2.900 mg/l
(COD) Test substance: 1 % solution

Components:**Citric acid monohydrate:**

- Biodegradability : Result: Readily biodegradable.
Method: OECD Test Guideline 301B

12.3 Bioaccumulative potential**Components:****Citric acid monohydrate:**

- Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

12.4 Mobility in soil**Components:****Citric acid monohydrate:**

- 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

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0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information : No data is available on the product itself.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of the product according to the defined EWC (European Waste Code) No.

Contaminated packaging : Take empty packaging to the recycling plant.

Waste key for the unused product : European waste catalog (EWC) 070601

Waste key for the unused product(Group) : Waste material of HZVA from fats, lubricants, soaps, detergents, disinfectants and personal protection products.

SECTION 14: Transport information

14.1 UN number

IMDG : UN 3265

IATA (Cargo) : UN 3265

14.2 UN proper shipping name

IMDG : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Citric acid monohydrate)

IATA (Cargo) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
(Citric acid monohydrate)

14.3 Transport hazard class(es)

IMDG : 8

IATA (Cargo) : 8

14.4 Packing group

IMDG

Packing group : III

Labels : 8

EmS Code : F-A, S-B

IATA (Cargo)

Packing instruction (cargo aircraft) : 856

Packing group : III

Labels : Corrosive

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14.5 Environmental hazards

IMDG

Marine pollutant : no

14.6 Special precautions for user

Not applicable

For personal protection see section 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 Concern for Authorisation (Article 59) : Not applicable

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

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

Volatile organic compounds : Remarks: none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

Other regulations:

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values.

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H319 : Causes serious eye irritation.

Full text of other abbreviations

Eye Irrit. : Eye irritation

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 Regula-

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tion; 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; 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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Met. Corr. 1, H290 : On basis of test data.
Eye Irrit. 2, H319 : Calculation method

Changes compared with the previous edition!!!

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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