1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : ThermoDent neutralizer

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

Use of the Substance/Mixture : Additive

Recommended restrictions on use : Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Producer/Supplier : Schülke & Mayr GmbH
Robert-Koch-Str. 2
22851 Norderstedt
Germany
Telephone: +4940521000
Telefax: +494052100318
mail@schuelke.com
www.schuelke.com

Contact person : Application Department HI
+49 (0)40/ 521 00 544 (Schülke UK +44 114 254 3500)
pab@schuelke.com

1.4 Emergency telephone number

Emergency telephone number : UK Poisons Emergency number: 0870 600 6266

Emergency telephone number : +49 (0)40 / 52 100 –0

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)

Irritant R36: Irritating to eyes.

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)

Hazard pictograms :



Irritant

R-phrase(s) : R36 Irritating to eyes.

S-phrase(s) : S26 In case of contact with eyes, rinse immedi-

ately with plenty of water and seek medical advice.

In the EU, this product falls under the Directive medical devices 93/42/EEC.The product is classified and labelled in accordance with EC directives or respective national laws.

2.3 Other hazards

No special risks known.

3. Composition/information on ingredients

3.2 Mixtures

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

Hazardous components

Chemical Name	Index-Number CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Citric acid monohydrate	5949-29-1 201-069-1	Xi; R36	Eye Irrit. 2; H319	30 - 50 %

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : No information available.

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 swallowed : Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

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.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Dry powder Foam Water spray jet Carbon dioxide (CO_2)
Unsuitable extinguishing media	:	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting	:	No information available.

5.3 Advice for firefighters

Special protective equipment for firefighters	:	No special precautions required.
Specific risk from the substance or the product itself, its combustion products or evolved gases	:	No special risks to be expected.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	No special precautions required.

6.2 Environmental precautions

Environmental precautions	:	No special environmental precautions required.

6.3 Methods and materials 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).

6.4 Reference to other sections

See chapter 8 + 13

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Prepare the working solution as given on the label(s) and/or the user instructions.
Advice on protection against fire and explosion	:	No special protective measures against fire required.

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.
Advice on common storage	:	Keep away from food and drink. Do not store together with alkalis.

7.3 Specific end use(s)

none

8. Exposure controls/personal protection

8.1 Control parameters

none

8.2 Exposure controls

Personal protective equipment

Eye protection	:	Safety glasses
Hygiene measures	:	Keep away from food and drink.
Protective measures	:	Avoid contact with eyes.

Environmental exposure controls

General advice	:	No special environmental precautions required.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	colourless
Odour	:	characteristic
Flash point	:	> 100 °C, ISO 2719
Lower explosion limit	:	not applicable
Upper explosion limit	:	not applicable
Flammability	:	does not ignite
Explosive properties	:	Not explosive
Oxidizing properties	:	not applicable
Auto-ignition temperature	:	not applicable
pH	:	> 1, 20 °C, concentrate
Melting point/freezing point	:	< -5 °C
Decomposition temperature		no data available
Boiling point/boiling range	:	ca. 100 °C
Vapour pressure	:	no data available
Density	:	ca. 1,17 g/cm3, 20 °C

Water solubility	:	20 °C, in all proportions
Partition coefficient: n-octanol/water	:	not applicable
Viscosity, dynamic	:	no data available
Relative vapour density	:	no data available
Evapouration rate	:	no data available

9.2 Other information

None known.

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

Reaction with alkalis(caustic liquors).

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

None reasonably foreseeable.

10.6 Hazardous decomposition products

Decomposition products : None reasonably foreseeable.

11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Citric acid monohydrate : LD50: > 3000 mg/kg, rat

Acute inhalation toxicity

Citric acid monohydrate : no data available

Acute dermal toxicity

Citric acid monohydrate : no data available

Acute toxicity (other routes of administration)

Citric acid monohydrate	:	LD50 intravenous: 961 mg/kg, mouse

Skin irritation

Citric acid monohydrate	:	rabbit, Result: Mild skin irritation, Based on available data, the classification criteria are not met.

Eye irritation

Citric acid monohydrate	:	rabbit, Result: Irritating to eyes.

Sensitisation

Citric acid monohydrate	:	Result: Does not cause skin sensitisation.

Mutagenicity

Citric acid monohydrate	:	not mutagenic

Carcinogenicity

Citric acid monohydrate	:	Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Citric acid monohydrate	:	rat, Oral, NOAEL: 2.500 mg/kg

Reproductive toxicity

Citric acid monohydrate	:	No toxicity to reproduction

Teratogenicity

Citric acid monohydrate	:	Did not show mutagenic or teratogenic effects in animal experiments.

Repeated dose toxicity

Citric acid monohydrate	:	rat, Oral, NOAEL: 1.200 mg/kg
Further information	:	No data is available on the product itself. The classification was made according to the calculation procedure of the Preparations Directive.

12. Ecological information

12.1 Toxicity

Toxicity to fish

Citric acid monohydrate	:	LC50: 440 - 760 mg/l, 96 h, Leuciscus idus (Golden orfe)

Toxicity to daphnia and other aquatic invertebrates

Citric acid monohydrate	:	EC50: 85 - 120 mg/l, 72 h, Daphnia magna

Toxicity to algae

Citric acid monohydrate	:	IC5: 640 mg/l, Scenedesmus quadricauda (Green algae)

12.2 Persistence and degradability

Biodegradability	:	Result: Readily biodegradable., OECD 301D / EEC 84/449 C6

12.3 Bioaccumulative potential

Bioaccumulation

Citric acid monohydrate	:	No bioaccumulation is to be expected (log Pow <= 4).
Partition coefficient: n-octanol/water	:	not applicable

12.4 Mobility in soil

Mobility

Citric acid monohydrate	:	no data available

12.5 Results of PBT and vPvB assessment

Assessment	:	This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other adverse effects

Additional ecological information	:	none

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.

14. Transport information

ADR	:	UN number	none
		Proper shipping name	
		-	
		Transport hazard class	-
		Packaging group	-
		Environmental hazards	-
		Classification Code	-
		ADR/RID-Labels	-
		ICAO-Labels	-
IMDG	:	UN number	none
		Proper shipping name	
		-	
		Transport hazard class	-
		Packaging group	-
		Environmental hazards	-
		EmS	-
IATA	:	UN number	none
		Proper shipping name	
		-	
		Transport hazard class	-
		Packaging group	-
		Environmental hazards	-

Special precautions for user

none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Exempt

15. Regulatory information

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

Legislation on the control of major-accident hazards involving dangerous substances	:	Directive 96/82/EC does not apply
Volatile organic compounds (VOC) content	:	none, Directive 1999/13/EC on the limitation of emissions of volatile organic compounds

15.2 Chemical Safety Assessment

Exempt

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R36	Irritating to eyes.

Full text of H-Statements referred to under sections 2 and 3.

H319	Causes serious eye irritation.

Further information

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.