

MUSCHELENTFERNER Art.-Nr. 975079S

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

1.1. Product identifier

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

Use of the substance/mixture

Washing and cleaning products (including solvent based products)

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	Seilflechter-Tauwerk GmbH	
Street:	Auf dem Anger 7-9	
Place:	D-38110 Braunschweig	
Telephone:	+49(0)5307-9611-0	
e-mail:	info@seilflechter.de	
Contact person:	Abteilung Produktsicherheit	Telephone: +49(0)2233 9323 760
Responsible Department:	info@drkeddo.de	

1.4. Emergency telephone number:

+49 (0) 361-730730 (24 h, GIZ Erfurt)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

No information available.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
617-48-1	DL-malic acid			30-40 %
	210-514-9		01-2119552463-40	
	Eye Irrit. 2; H319			
77-92-9	Citric acid			<20 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest.
If unconscious place in recovery position and seek medical advice.
In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.
In case of skin irritation, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person or a person with cramps.
Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.
First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO₂), Foam, Dry extinguishing powder, alcohol resistant foam

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:

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Pyrolysis products, toxic; Nitrogen oxides (NOx); Carbon dioxide; Carbon monoxide

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

Provide adequate ventilation.

Personal protection equipment: see section 8

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special technical protective measures are necessary.

Avoid contact with eyes and skin. Avoid dust formation. Do not breathe dust.

Wear personal protection equipment (refer to section 8).

Keep container tightly closed.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

No information available.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

No special technical protective measures are necessary.

Keep/Store only in original container.

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Advice on storage compatibility

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

No information available.

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
617-48-1	DL-malic acid		
Worker DNEL, long-term	inhalation	systemic	5,33 mg/m ³
Worker DNEL, acute	inhalation	systemic	104 mg/m ³
Worker DNEL, long-term	inhalation	local	32 mg/m ³
Worker DNEL, acute	inhalation	local	104 mg/m ³
Worker DNEL, long-term	dermal	systemic	2 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day
Worker DNEL, long-term	dermal	local	1 mg/cm ²
Worker DNEL, acute	dermal	local	1 mg/cm ²
Consumer DNEL, long-term	inhalation	systemic	1,6 mg/m ³
Consumer DNEL, acute	inhalation	systemic	52 mg/m ³
Consumer DNEL, long-term	inhalation	local	1,6 mg/m ³
Consumer DNEL, acute	inhalation	local	52 mg/m ³
Consumer DNEL, long-term	dermal	systemic	6 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term	dermal	local	0,5 mg/cm ²
Consumer DNEL, acute	dermal	local	0,4 mg/cm ²
Consumer DNEL, long-term	oral	systemic	6 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	20 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment	Value	
617-48-1	DL-malic acid	
Marine water	0,01 mg/l	
77-92-9	Citric acid	
Freshwater	0,44 mg/l	
Marine water	0,044 mg/l	
Freshwater sediment	34,6 mg/kg	
Marine sediment	3,46 mg/kg	
Soil	33,1 mg/kg	

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

Protective and hygiene measures

When using do not eat, drink, smoke, sniff. Avoid contact with eyes and skin. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

Eye/face protection

goggles

Hand protection

Tested protective gloves must be worn: DIN EN 374

Suitable material:

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NBR (Nitrile rubber)

Butyl caoutchouc (butyl rubber)

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Body protection: not required.

Respiratory protection

Usually no personal respirative protection necessary.

Environmental exposure controls

See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	solid
Colour:	transparent
Odour:	odourless

Test method

pH-Value (at 20 °C):	7,5
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Changes in the physical state

Melting point:	not applicable
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Initial boiling point and boiling range:	not applicable
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Flash point:	>100 °C
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Flammability

Solid:	not determined
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Gas:	not applicable
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Explosive properties

dust explosive

Lower explosion limits:	not determined
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Upper explosion limits:	not determined
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Auto-ignition temperature

Solid:	not determined
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Gas:	not applicable
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Decomposition temperature:	not determined
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Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
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Density:	1,16 g/cm ³
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Water solubility:	completely miscible
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Solubility in other solvents

not determined

Partition coefficient:	not determined
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:	not determined
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No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materialsOxidising agent, strong ,
Alkali (lye) ,
Amines ,
Alkali metals**10.6. Hazardous decomposition products**

No information available.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

Acute toxicity

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

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
617-48-1	DL-malic acid			
	oral	LD50 ca. 1600 mg/kg	Mouse	ECHA
77-92-9	Citric acid			
	oral	LD50 5400 mg/kg	Mouse	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	OECD Guideline 402

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

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Specific effects in experiment on an animal

No information available.

Practical experience**Observations relevant to classification**

No information available.

Other observations

No information available.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information**12.1. Toxicity**

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
77-92-9	Citric acid				
	Acute fish toxicity	LC50	440 mg/l	96 h	Leuciscus idus melanotus
	Acute crustacea toxicity	EC50	1535 mg/l	48 h	Daphnia magna

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
77-92-9	Citric acid	-0,12

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Other adverse effects

No information available.

Further information

No information available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

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14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

DL-malic acid
Citric acid

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CAS: Chemical Abstracts Service (division of the American Chemical Society)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
EC50: Effectice concentration, 50 percent
DNEL: Derived No Effect Level

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PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Relevant H and EUH statements (number and full text)

H319 Causes serious eye irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)