Telefax: +49 (0) 5257 932 618

## **Safety Data Sheet**

according to UK REACH Regulation

## **Duschreiniger**

Revision date: 02.09.2021 Product code: Page 1 of 10

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

#### 1.1. Product identifier

Duschreiniger

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

#### Use of the substance/mixture

Cleaner

#### Uses advised against

Any non-intended use.

## 1.3. Details of the supplier of the safety data sheet

Company name: Dr.-Ing Hans Mosel GmbH Street: Josef - Förster Str. 10 Place: D-33161 Hövelhof Telephone: +49 (0) 5257 932 601

e-mail: info@moselgmbh.de www.moselgmbh.de Internet:

Responsible Department: Dr. Gans-Eichler

e-mail: info@tge-consult.de Tel.: +49(0)2534 6441185 Chemieberatung GmbH Otto-Hahn-Str. 36 www.tge-consult.de

D-48161 Münster

1.4. Emergency telephone +49 (0) 5257 932 601

Mo - Fr 9:00 - 16:00 number:

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## **GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

#### 2.2. Label elements

## Additional advice on labelling

Labelling according to to GHS (UK CLP) regulation.: none

## 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. No risks worthy of mention. Please observe the information on the safety data sheet at all times.

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

## 3.2. Mixtures

#### **Hazardous components**

CAS No	Chemical name					
	EC No Index No REACH No					
	GHS Classification					
77-92-9	citric acid					
	201-069-1 01-2119457026-42					
	Eye Irrit. 2; H319					

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

#### Specific Conc. Limits. M-factors and ATE

-	· • · · · · · · · · · · · · · · · · · ·							
CAS No	EC No	Chemical name	Quantity					
	Specific Conc. I	Limits. M-factors and ATE						

## according to UK REACH Regulation

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77-92-9	201-069-1	citric acid	5 - < 7 %
	dermal: LD50 =	> 2000 mg/kg; oral: LD50 = 5400 mg/kg	

#### Labelling for contents according to Regulation (EC) No 648/2004

< 5 % anionic surfactants, preservation agents (2-Bromo-2-nitropropane-1,3-diol).

#### **Further Information**

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

## **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

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

#### After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

#### After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

## 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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

## Unsuitable extinguishing media

High power water jet.

## 5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

## 5.3. Advice for firefighters

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.

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

## **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

## General measures

Safe handling: see section 7

## according to UK REACH Regulation

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## For non-emergency personnel

Wear personal protection equipment (refer to section 8).

#### For emergency responders

No special measures are necessary.

#### 6.2. Environmental precautions

Discharge into the environment must be avoided.

## 6.3. Methods and material for containment and cleaning up

#### For containment

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.

#### For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

Disposal: see section 13

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Wear suitable protective clothing. (See section 8.)

## Advice on protection against fire and explosion

Usual measures for fire prevention.

## Advice on general occupational hygiene

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

#### Further information on handling

General protection and hygiene measures: See section 8.

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

## Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

#### Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

## Further information on storage conditions

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

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

## 7.3. Specific end use(s)

See section 1.

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

## 8.1. Control parameters

#### **PNEC** values

CAS No	Substance				
Environmental compartment Value					
77-92-9	citric acid				
Freshwater 0,44 mg/l					
Marine water	0,044 mg/l				

## according to UK REACH Regulation

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Freshwater sediment	34,6 mg/kg
Marine sediment	3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)	1000 mg/l
Soil	33,1 mg/kg

#### Additional advice on limit values

To date, no national critical limit values exist.

#### 8.2. Exposure controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

#### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

#### Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

## Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

#### Thermal hazards

No special precautionary measures are necessary.

## **Environmental exposure controls**

No special precautionary measures are necessary.

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

## 9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour: not determined
Odour: characteristic

#### Changes in the physical state

according to UK REACH Regulation

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Melting point/freezing point:	not determined	
Boiling point or initial boiling point and boiling range:	not determined	
Sublimation point:	not determined	
Softening point:	not determined	
Pour point:	not determined	
Flash point:	not determined	
Explosive properties none		
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Auto-ignition temperature:	not determined	
Self-ignition temperature		
Gas:	not determined	
Decomposition temperature:	not determined	
Oxidizing properties none		
pH-Value:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic:	not determined	
Flow time:	not determined	
Water solubility:	not determined	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	SECTION 12: Ecological information	
Vapour pressure:	not determined	
Density:	not determined	
Relative vapour density:	not determined	
9.2. Other information		
Information with regard to physical hazard classes Sustaining combustion:	Not sustaining combustion	
Other safety characteristics		
Solvent separation test:	not determined	
Solvent content:	not determined	
Solid content:	not determined	
Evaporation rate:	not determined	
Further Information		
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.

## according to UK REACH Regulation

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#### 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Refer to chapter 10.5.

#### 10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

## 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

#### 10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

## **SECTION 11: Toxicological information**

## 11.1. Information on hazard classes as defined in GB CLP Regulation

#### Toxicocinetics, metabolism and distribution

No data available.

#### Acute toxicity

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

CAS No	Chemical name	Chemical name						
	Exposure route	Dose		Species	Source	Method		
77-92-9	citric acid	citric acid						
	oral	LD50 mg/kg	5400	Mouse	ECHA Dossier	OECD Guideline 401		
	dermal	LD50 mg/kg	> 2000	Rat	ECHA Dossier	OECD Guideline 402		

#### Irritation and corrosivity

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.

citric acid monohydrate (CAS-No.: 77-92-9):

In-vitro mutagenicity:

Method: OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Result: negative. Literature information: ECHA Dossier

## 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.

## Specific effects in experiment on an animal

No data available.

## 11.2. Information on other hazards

## **Endocrine disrupting properties**

No data available.

## **SECTION 12: Ecological information**

## according to UK REACH Regulation

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#### 12.1. Toxicity

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The product has not been tested.

CAS No	Chemical name	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
77-92-9	citric acid	citric acid							
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Pimephales promelas	ECHA Dossier	OECD Guideline 203		
	Acute crustacea toxicity	EC50 (24h) mg/l	> 50	48 h	Dreissena polymorpha	ECHA Dossier			
	Algae toxicity	NOEC	425 mg/l		Scenedesmus quadricauda	EPSR Bringmann& Kuhn (1980)			

## 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name							
	Method Value d Source							
	Evaluation							
77-92-9	citric acid							
	OECD 301B / ISO 9439 / EEC 92/69 annex V, C.4-C 97 % 28 ECHA Dossier							
	Easily biodegradable (concerning to the criteria of the OECD)							

#### 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	-1,55

## **BCF**

CAS No	Chemical name	BCF	Species	Source
77-92-9	citric acid	3,2		ECHA Dossier

## 12.4. Mobility in soil

No data available.

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Endocrine disrupting properties

No data available.

#### 12.7. Other adverse effects

No data available.

## **Further information**

Do not allow to enter into surface water or drains.

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **Disposal recommendations**

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

according to UK REACH Regulation

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List of Wastes Code - residues/unused products

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused

products; organic wastes other than those mentioned in 16 03 05

List of Wastes Code - used product

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused

products; organic wastes other than those mentioned in 16 03 05

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately

collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

## **SECTION 14: Transport information**

#### Land transport (ADR/RID)

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

Inland waterways transport (ADN)

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

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of these transport regulations.14.2. UN proper shipping name:No dangerous good in sense of these transport regulations.14.3. Transport hazard class(es):No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of these transport regulations.14.2. UN proper shipping name:No dangerous good in sense of these transport regulations.14.3. Transport hazard class(es):No dangerous good in sense of these transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

## **SECTION 15: Regulatory information**

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

#### **EU** regulatory information

2010/75/EU (VOC): No information available. 2004/42/EC (VOC): No information available.

Information according to 2012/18/EU

(SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

#### according to UK REACH Regulation

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#### Additional information

Safety Data Sheet according to UK-REACH Regulation

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

UK REACH Appendix XVII, No (mixture): not relevant

#### **National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

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

#### **SECTION 16: Other information**

## Changes

Rev. 1.0; Initial release: 02.09.2021

#### 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)

AGW: Arbeitsplatzgrenzwert CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European LIst of Notified Chemical Substances

ECHA: European Chemicals Agency EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

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)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

h: hour

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

NOAEC: No observed adverse effect concentration

NLP: No-Longer Polymers

N/A: not applicable

OECD: Organisation for Economic Co-operation and Development

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

REACH: Registration, Evaluation, Authorisation of Chemicals

SVHC: substance of very high concern TRGS: Technische Regeln für Gefahrstoffe

**UN: United Nations** 

VOC: Volatile Organic Compounds

according to UK REACH Regulation

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#### Relevant H and EUH statements (number and full text)

H319 Causes serious eye irritation.

#### **Further Information**

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method. Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

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.)