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

1.1 Product identifier

Trade name/designation

Chrom(VI)-Neutralisator

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

Relevant identified uses

Reducing agent

1.3 Details of the supplier of the safety data sheet

Supplier

HM Industrieservice GmbH
Großer Sand 3 Telephone: +49 7251 44127 0
76698 Ubstadt-Weiher Telefax: +49 7251 44127 29
Germany E-mail: info@hm-industrie.de

Department responsible for information

E-mail (competent person) info@hm-industrie.de

1.4 Emergency telephone number

Zentrale HM Industrieservice GmbH
Emergency telephone number: +49 7251 44127 0
(Mo-Fr 7:30-16:00 Uhr)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

not applicable

Signal word

not applicable

Hazard statements

not applicable

Precautionary statements

not applicable

Hazard components for labelling

not applicable

Supplemental hazard information

EUH210 Safety data sheet available on request.

2.3 Other hazards

* **Results of PBT and vPvB assessment**

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

* **Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Hazardous ingredients

CAS No.	Substance name	

	EC No. Index No.	REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	% [mass]
*	5949-29-1 611-842-9 -	**Citric acid monohydrate** 01-2119457026-42 Eye Irrit. 2 H319 / STOT SE 3 H335	> 3,00 - ≤ 5,00

Remark
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 all cases of doubt, or when symptoms persist, seek medical advice. If unconscious but breathing normally, place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

* Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.
Wash contaminated clothing before reuse.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

In all cases of doubt, or when symptoms persist, seek medical advice.

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO2), Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

* Inhaling hazardous decomposing products can cause serious health damage.

Hazardous combustion products

Carbon oxides (COx), Sulfur oxides (SOx)

5.3 Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

For containment

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

For cleaning up

Clean using cleansing agents. Do not use solvents.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: refer to section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes.
Personal protection equipment: see section 8.
Always keep in containers that correspond to the material of the original container.
Follow the legal protection and safety regulations.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

7.2

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO).
Keep container tightly closed. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

Storage class LGK12 - non-combustible liquids that cannot be assigned to any of the above storage classes

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No data available

Biological limit values

No data available

PNEC

CAS No.	Substance name	PNEC type	PNEC Value
5949-29-1	Citric acid monohydrate	aquatic, freshwater	0.44 mg/L
5949-29-1	Citric acid monohydrate	aquatic, marine water	0.044 mg/L
5949-29-1	Citric acid monohydrate	sewage treatment plant	1,000 mg/L
5949-29-1	Citric acid monohydrate	sediment, freshwater	34.6 mg/kg sediment dw
5949-29-1	Citric acid monohydrate	sediment, marine water	3.46 mg/kg sediment dw

8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection

Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material >= 0.4 mm
Breakthrough time >= 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.
Recommended glove articles: EN ISO 374

Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Eye glasses with side protection: EN 166

Body protection

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. Anti-static clothing including shoes are recommended.

Remark

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains.See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid	
Colour	yellow	
Odour	characteristic	
pH at 20.0 °C	1.5 - 2.5	
Melting point/freezing point	not determined	literature value
Initial boiling point and boiling range	100 °C	DIN 51751
	Source: water	
Flash point	not determined	
flammability	not applicable	
Lower explosion limit at 20°C	not determined	
Upper explosion limit at 20°C	not determined	
Vapour pressure at 20°C	19.5 mbar	
Relative vapour density	not applicable	
Density at 20 °C	1.06 kg/l	
Water solubility at 20°C	completely miscible	
Partition coefficient: n-octanol/water	see section 12	
Auto-ignition temperature	345 °C	
	Source: Citric acid monohydrate	
Decomposition temperature	not determined	
Kinematic viscosity at 40 °C	not determined	
Dynamic viscosity at 20 °C	not determined	
particle characteristics	not applicable	

9.2 Other information

Form: liquid

Information with regard to physical hazard classes

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3 Possibility of hazardous reactions

Reaction with: Alkali (lye)

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

Oxidizing agents, Alkalis and basic substances

10.6 Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

Respiratory or skin sensitisation

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

Overall assessment on CMR properties

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.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

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

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water = -1.64 (Citric acid monohydrate)

12.4 Mobility in soil

No information 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

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to EWC/AVV

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Other disposal recommendations

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1 UN number or ID number

not applicable

14.2 UN proper shipping name

Land transport (ADR/RID)

No dangerous good in sense of these transport regulations.

Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Land transport (ADR/RID)	not applicable
Sea transport (IMDG)	not applicable

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (ADR/RID)

not applicable

Sea transport (IMDG)

not applicable

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

Use restriction according to REACH annex XVII, no.: 03

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC value: 0 g/l

* **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]**
Hazard categories / Named dangerous substances

This product is not classified according to Directive 2012/18/EU.

National regulations

Observe in addition any national regulations!

Substance/product listed in the following inventories

DSL - CA
* VNECI - VN

15.2 Chemical Safety Assessment

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

REACH No.	Substance name	CAS No. EC No.
01-2119457026-42	Citric acid monohydrate	5949-29-1 611-842-9

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

not applicable

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL: Occupational Exposure Limit Value
BLV: Biological limit values
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging
CMR: Carcinogenic, Mutagenic and Reprotoxic
DIN: German Institute for Standardization / German industrial standard
DNEL: Derived No-Effect Level
EAKV: European Waste Catalogue Directive
EC: Effective Concentration
EC: European Community
EN: European Standard
EU/EEA: European Economic Area
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
LC: Lethal Concentration
LD: Lethal Dose
MAK: Maximum wokplace concentration
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD: Organisation for Economic Cooperation and Development
PBT: persistent, bioaccumulative, toxic
PNEC: Predicted No Effect Concentration
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.
replaces version: 3.0
replaces revision of: 30 Jan 2026
The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.