Safety Data Sheet

WK Mineral- & Rostentferner – pursuant to Regulation (EC) No 1907/2006 (REACH), Annex II

Issue: 17 October 2026

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

1.1 Product identifier

Trade name: WK Mineral- & Rostentferner.

1.2 Relevant identified uses and uses advised against

Washing and cleaning agent (PC 35); removal of mineral deposits and rust in accordance with the product instructions. No additional specific restrictions on use are documented.

1.3 Details of the supplier of the safety data sheet

Wandelkraft Chemie GmbH · Eichelsweg 6 · 64367 Mühltal · Germany
Telephone: +49 171 3560169 · Email: office@wandelkraft24.com

1.4 Emergency telephone number

+49 171 3560169

SECTION 2: Hazards identification

2.1 Classification of the mixture

Based on the available information, the mixture is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

EUH210: Safety data sheet available on request. No CLP hazard pictograms are indicated for the mixture.

2.3 Other hazards

According to the available information, the constituents do not meet the PBT or vPvB criteria under REACH Annex XIII. Endocrine-disrupting properties under the relevant statutory criteria are not known for the mixture.

No other hazards are known on the basis of the available information.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Citric acid	**CAS 77-92-9 · EC 201-069-1 · REACH 01-2119457026-42-XXXX · ≥ 1 to < 5 wt.% · Eye Irrit. 2, H319; STOT SE 3, H335**

SECTION 4: First aid measures

4.1 Description of first aid measures

General	Seek medical advice if symptoms occur or in cases of doubt. Do not give anything by mouth to an unconscious or convulsing person.
Inhalation	Move the affected person to fresh air; keep warm and at rest.

Skin contact	Wash affected skin thoroughly with plenty of water and soap; use replenishing skin care if needed.
Eye contact	Immediately rinse with running water for 10–15 minutes, keeping the eyelids open. Protect the unaffected eye and arrange an ophthalmological examination.
Ingestion	Rinse mouth. If conscious and able to swallow, give one glass of water in small sips. Do not induce vomiting; seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Repeated or prolonged skin contact may cause irritation (see Section 11).

4.3 Indication of any immediate medical attention and special treatment needed

No special measures specified.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable: water, foam, dry powder, carbon dioxide, sand, nitrogen or fire blanket. Unsuitable: solid water jet. Adapt firefighting measures to the surrounding fire.

5.2 Special hazards arising from the mixture

The product itself is not combustible. Carbon monoxide and carbon dioxide may form in a fire.

5.3 Advice for firefighters

Firefighting measures must take the surrounding hazards into account. Use suitable personal protective equipment as required by the fire conditions.

SECTION 6: Accidental release measures

6.1 Personal precautions

Spilled product may create a slipping hazard. Use suitable personal protective equipment.

6.2 Environmental precautions

Prevent entry into sewers, surface waters, soil and subsoil.

6.3 Methods and material for containment and cleaning up

Promptly absorb spilled material with an absorbent (e.g. cloth or fleece). Rinse affected areas with water in compliance with local requirements. Dispose of collected material according to Section 13.

6.4 Reference to other sections

Section 7: handling and storage; Section 8: personal protection; Section 13: disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly closed after use. Avoid contact with eyes and skin as far as possible. Use according to the instructions.

7.2 Conditions for safe storage

Store in the original container and protect from frost. Storage class under German TRGS 510: 12.

7.3 Specific end use(s)

Follow the instructions for use and the product technical data sheet. Before use, test material compatibility on an inconspicuous area, especially on sensitive surfaces.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Citric acid (CAS 77-92-9): German occupational exposure limit under TRGS 900 (2026): 2 mg/m³ (inhalable fraction); peak limitation 2(I), note Y (source data dated 23 June 2022). Calculated short-term concentration 4 mg/m³; 8-hour time-weighted limit 2 mg/m³. RCP method: not applicable. These are German limits; applicable national limits in the country of use must also be checked.

8.2 Exposure controls and protective measures

Eye/face protection	**Wear suitable safety goggles to EN 166 if splashing is possible.**
Hand protection	Chemical protective gloves to EN 374: nitrile rubber (NBR), material thickness 0.4 mm, reported breakthrough time 480 minutes. Verify suitability and practical wearing time with the glove manufacturer for the specific task.
Respiratory protection	Normally not required. If applicable exposure limits are exceeded, use suitable respiratory protection with particle filter type P2. Observe applicable respiratory protection rules and wearing-time limitations.
Hygiene	Do not eat, drink or smoke at work. Wash hands after work and launder contaminated clothing before reuse. Do not carry product-soaked cloths in clothing.

Absorption of contaminants or contact with other substances may result in mixtures with different hazardous properties. Select personal protective equipment based on the actual operating conditions and risk assessment, taking the stated protection measures as a starting point.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state / colour	**liquid / colourless**
Odour	fruity, acidic
Melting/freezing point	−1.7 °C (1013 hPa)
Initial boiling point	> 100 °C (1013 hPa)
Flash point	not relevant (DIN EN ISO 13736)
Auto-ignition temperature	no value reported
Flammability	not flammable
Explosive limits	not relevant
Vapour pressure	not determined at 50 °C
Density	approx. 1.05 g/cm³ at 20 °C
Water solubility	completely miscible with water at 20 °C
pH	2.2 at 20 °C
Kinematic viscosity	< 30 mm²/s at 20 °C
Relative vapour density	not determined
Solvent separation test	not relevant
EU VOC content	0 wt.%
Swiss VOC content	0.9 wt.%
Swiss VOC subject to levy	0.9 wt.%

9.2 Other information – key terms explained

Combustibility	Whether a substance can burn under defined conditions.
Flammability	How readily a substance can ignite under given conditions. The flash point is particularly important for liquids.
Flash point	Lowest temperature at which a liquid releases enough flammable vapour for momentary ignition by an ignition source under standard test conditions.
Auto-ignition temperature	Temperature at which a substance may ignite without an external spark or flame under specified test conditions.
Boiling point	Temperature at which a liquid starts to boil at a specified pressure.
Vapour pressure	Simplified measure of a liquid’s tendency to enter the gas phase.
Sustained combustion	Whether a liquid continues burning after the ignition source is removed.

SECTION 10: Stability and reactivity

10.1 Reactivity

Not considered reactive under normal conditions of use on the basis of the available information.

10.2 Chemical stability

Stable under the intended storage, use and temperature conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Protect from frost during storage (see Section 7).

10.5 Incompatible materials

Check the acid resistance of treated surfaces.

10.6 Hazardous decomposition products

None known under intended conditions of use. See Section 5 for combustion products.

SECTION 11: Toxicological information

11.1 Information on hazard classes under CLP

Acute toxicity – Citric acid: oral LD50 (rat) > 2,000 mg/kg body weight. This is substance-specific data and not a measured value for the complete mixture.

Eye irritation – Citric acid causes serious eye irritation in substance testing (rabbit, OECD 405); the classification criteria are not met for this mixture.

Respiratory tract irritation – Citric acid as an ingredient is irritating; based on the available information, the mixture does not meet the classification criteria.

Other toxicological hazard classes – No further relevant information is available concerning skin irritation, sensitisation, carcinogenicity, mutagenicity, reproductive toxicity, specific target organ toxicity or aspiration hazard.

11.2 Information on other hazards

According to the available information, the mixture contains no ingredients meeting the relevant criteria for endocrine disruption in humans. Toxicokinetic data for the mixture are unavailable. Frequent or prolonged skin contact may cause irritation. Toxicological statements are derived from constituent properties; the finished mixture has not been tested separately.

SECTION 12: Ecological information

12.1 Toxicity

The following test results concern citric acid as an ingredient, not the complete mixture:

Fish toxicity: LC50 = 440 mg/l, golden orfe (Leuciscus idus), 48 hours, OECD 203.

Water flea toxicity: EC50 = 1,535 mg/l, Daphnia magna, 24 hours.

Algae: NOEC = 425 mg/l, Scenedesmus quadricauda, 8 days, tested according to OECD 201.

12.2 Persistence and degradability

Citric acid is readily biodegradable according to the cited OECD tests. Aerobic degradation: 97% within 28 days (CO_2 evolution, OECD 301B) or 100% within 19 days (DOC removal, OECD 301E). These results apply to the ingredient, not to the entire product.

12.3 Bioaccumulative potential

No evidence of bioaccumulation potential according to the available information.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The constituents do not meet the PBT/vPvB criteria under REACH Annex XIII.

12.6 Endocrine disrupting properties

The product contains no substances meeting the relevant criteria for endocrine-disrupting properties in non-target organisms.

12.7 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste code 20 01 30: detergents other than those mentioned in 20 01 29. Dispose of residues and containers through appropriate waste or recycling facilities in compliance with local rules. Containers may be reused where appropriate after complete emptying and proper cleaning. Treat contaminated, uncleaned packaging in the same way as the product.

13.2 Additional information

The final waste code depends on the source, use and possible contamination of the waste; check for the specific activity and process.

SECTION 14: Transport information

The mixture is not classified as dangerous goods for transport.

14.1 UN number or ID number

Not applicable.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

No transport-related dangerous goods classification indicated.

14.6 Special precautions for user

No additional information.

14.7 Maritime transport in bulk according to IMO instruments

Not intended for bulk carriage in accordance with the IBC Code.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations

REACH Annex XVII: entries 55 and 75 concern restrictions on use; detergent ingredient declaration under Regulation (EC) No 648/2004: < 5% non-ionic surfactants and < 5% anionic surfactants. German TA Luft, item 5.2.5 I: < 5% by weight. German water hazard class under AwSV: 1 (slightly hazardous to water). Not a flammable liquid under the German Industrial Safety Regulation (BetrSichV). National provisions in the country of supply must additionally be observed.

15.2 Chemical safety assessment

No separate chemical safety assessment has been carried out for the mixture.

SECTION 16: Other information

16.1 Revision information

Wandelkraft issue dated 17 October 2026 supersedes the earlier 2025 issue.

16.2 Abbreviations

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road; AOX: adsorbable organically bound halogens; AwSV: German Ordinance on Facilities Handling Substances Hazardous to Water; CAS: Chemical Abstracts Service; CLP: classification, labelling and packaging; DNEL: derived no-effect level; EC50/LC50: effect/lethal concentration for 50%; ECHA: European Chemicals Agency; OECD: Organisation for Economic Co-operation and Development; PBT: persistent, bioaccumulative and toxic; REACH: EU chemicals regulation; TRGS: German technical rules for hazardous substances; VOC: volatile organic compounds; vPvB: very persistent and very bioaccumulative; WGK: German water hazard class.

16.3 Data sources

Product-specific safety data and substance information; applicable REACH/CLP legislation and the test methods cited in this document.

16.4 Classification and assessment method

The mixture is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP).

The classification is based on available safety information about the mixture and its constituents. The method applied for the assessment must be supported by the relevant classification documentation before release.

16.5 Full text of hazard statements

H319: Causes serious eye irritation. H335: May cause respiratory irritation. H319 and H335 refer to the ingredient listed in Section 3 and do not constitute classification of the mixture.

16.6 Training advice

Training in safe handling, skin and eye protection and appropriate disposal is recommended.

16.7 Additional information

The information in this safety data sheet is intended to describe safe handling of the product and does not constitute a warranty of specific product properties.

Mixing with other substances or absorption of contaminants may change the hazardous properties of the resulting mixture.

Before use, test material compatibility on a suitable, preferably inconspicuous area to reduce the risk of damage arising from inadequate acid resistance.