



Safety Data Sheet

in accordance with Regulation (EC) No 1907/2006 (REACH) as amended by Regulation (EU) 2020/878

KRAFTPROTZ Enzyme Cleaner

Version number:	GHS 2.0
Date of preparation:	21.03.2022
Date of revision:	02.03.2026
Replaces version dated:	21.03.2022 (GHS 1.0)

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

1.1 Product identifier

Trade name:	KRAFTPROTZ Enzyme Cleaner 750 ml
Product number:	KPEZR750
Other designations:	KRAFTPROTZ Enzymreiniger, KRAFTPROTZ Enzym-Reiniger

1.2 Relevant identified uses of the mixture and uses advised against

Relevant identified uses:	Consumer uses. Microbiological cleaning agent (bacterial mixture of risk group 1) for the deep removal of stains and odours from organic residues (e.g. urine, saliva, vomit, sweat, food residues) on carpets, upholstery, mattresses, textiles, car seats, pet bedding and similar absorbent materials.
Uses advised against:	Any use other than those identified in 1.2. Not intended for use on animals or for therapeutic purposes. Do not use in combination with chemicals, bleach or laundry detergents, as these will inactivate the contained micro-organisms.

1.3 Details of the supplier of the safety data sheet

Supplier / Manufacturer:	ARKA Biotechnologie GmbH
Address:	Mühlach 53–55 90552 Röthenbach an der Pegnitz Germany
Telephone:	+49 (0)911 5698610 00
Fax:	+49 (0)911 5698610 29
E-mail (competent person):	info@arka-biotech.de
Website:	www.arka-biotech.de

1.4 Emergency telephone number

Supplier emergency information service:	ARKA Biotechnologie GmbH, available Monday to Friday from 08:00 to 17:00 CET at +49 (0)911 5698610 00
NHS 111 (England, Scotland NHS 24, Wales NHS Direct):	111 – non-emergency medical helpline for members of the public following exposure to a chemical, available 24 hours/day, 7 days/week
NPIS (National Poisons Information Service):	for healthcare professionals only via TOXBASE® (www.toxbase.org); not available to the public. Manufacturer-submitted SDS lodged with NPIS Birmingham (sds.npis@nhs.net).
European Emergency Number:	112

SECTION 2: Hazards identification

2.1 Classification of the mixture

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

This mixture does not meet the criteria for classification under Regulation (EC) No 1272/2008. It is not classified as hazardous within the meaning of the CLP Regulation.

2.2 Label elements

Labelling under Regulation (EC) No 1272/2008 (CLP): not applicable.

Hazard pictograms:	not applicable
Signal word:	not applicable
Hazard statements (H-phrases):	not applicable
Precautionary statements (P-phrases):	not applicable
Supplemental label elements:	Contains Limonene, Linalool, Geraniol, Citronellol, Eugenol and Coumarin. May produce an allergic reaction.

Labelling under Regulation (EC) No 648/2004 (Detergents Regulation):

Ingredients according to Annex VII Section D: < 5 % phosphates (monopotassium orthophosphate E 340a, dipotassium orthophosphate E 340b), < 5 % non-ionic surfactants, < 5 % perfumes (LIMONENE, LINALOOL, GERANIOL, CITRONELLOL, EUGENOL, COUMARIN, EUCALYPTOL, CAMPHOR, METHYL SALICYLATE, ISOAMYL SALICYLATE, ANETHOLE, DIMETHYL PHENETHYL ACETATE), preservative (SALICYLIC ACID), micro-organisms class 1.

2.3 Other hazards

The mixture does not contain any substance that meets the PBT or vPvB criteria according to REACH Annex XIII.

The mixture does not contain substances with endocrine-disrupting properties according to the criteria of Regulations (EU) 2017/2100 or (EU) 2018/605 at a concentration of ≥ 0.1 %.

The mixture contains micro-organisms of risk group 1 according to Directive 2000/54/EC (bacteria that are unlikely to cause human disease). For immunocompromised persons, a risk cannot be entirely excluded.

SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable – the product is a mixture.

3.2 Mixtures

Chemical characterisation:	Aqueous solution containing micro-organisms of risk group 1, non-ionic surfactants, inorganic
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phosphates as buffering agents and nature-identical fragrance components.

Components according to Regulation (EC) No 648/2004, Annex VII, and substances above the labelling thresholds:

Designation (INCI)	CAS No	EC No	Conc. [% w/w]	CLP classification
Aqua (water)	7732-18-5	231-791-2	> 95	not classified
Microorganisms cl. 1 (bacterial mixture, risk group 1)	—	—	< 1	not classified
Non-ionic surfactants (mixture)	—	—	< 1	not classified
Monopotassium orthophosphate (E 340a)	7778-77-0	231-913-4	< 1	not classified
Dipotassium orthophosphate (E 340b)	7758-11-4	231-834-5	< 1	not classified
Salicylic acid	69-72-7	200-712-3	0.12	Acute Tox. 4, H302; Eye Dam. 1, H318; Repr. 2, H361d
Linalool	78-70-6	201-134-4	0.09	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317
Limonene	5989-27-5	227-813-5	0.09	Flam. Liq. 3, H226; Skin Irrit. 2, H315; Skin Sens. 1B, H317; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
α -Terpineol	98-55-5	202-680-6	0.075	Skin Irrit. 2, H315; Eye Irrit. 2, H319
Methyl salicylate	119-36-8	204-317-7	0.025	Acute Tox. 4, H302
Isoamyl salicylate	87-20-7	201-730-4	0.04	Skin Sens. 1B, H317; Aquatic Chronic 2, H411
Eucalyptol (1,8-cineole)	470-82-6	207-431-5	0.03	Flam. Liq. 3, H226; Skin Irrit. 2, H315
Geraniol	106-24-1	203-377-1	0.03	Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317
Coumarin	91-64-5	202-086-7	0.025	Acute Tox. 4, H302; Skin Sens. 1B, H317
Camphor (synthetic)	76-22-2	200-945-0	0.02	Flam. Sol. 2, H228; Acute Tox. 4, H302; Acute Tox. 4, H312
Citronellol	106-22-9	203-375-0	0.015	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317
Anethole	104-46-1	203-205-5	0.015	Skin Sens. 1B, H317
Dimethyl phenethyl acetate	151-05-3	205-781-3	0.015	Aquatic Chronic 3, H412
Eugenol	97-53-0	202-589-1	0.015	Eye Irrit. 2, H319; Skin Sens. 1B, H317

Sulphur	7704-34-9	231-722-6	0.16	Skin Irrit. 2, H315
Silicon	7440-21-3	231-130-8	0.06	not classified

The full text of the H-statements indicated is given in Section 16.

The concentrations stated for the fragrance components and salicylic acid are based on analytical results of a product variant with identical formulation (LAVES Niedersachsen, test report 072312-000157, sample no. 07-52323-0423), and on the in-house formulation. The preparation does not contain any other hazardous substances in quantities that would have to be mentioned in this section under applicable EU legislation.

SECTION 4: First-aid measures

4.1 Description of first aid measures

General information:

In case of discomfort or in case of doubt, seek medical advice. Never give anything by mouth to an unconscious person. Remove contaminated or soaked clothing immediately.

If inhaled:

Move person into fresh air. If symptoms persist, seek medical advice.

In case of skin contact:

Wash skin thoroughly with water or shower. If skin irritation or rash occurs: get medical advice/attention.

In case of eye contact:

Hold eyelids open and rinse with plenty of clean, running water for at least 10 minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.

If swallowed:

Rinse mouth thoroughly with water. Drink plenty of water, ideally with activated charcoal. Do not induce vomiting without medical advice. If symptoms occur, seek medical advice and show this safety data sheet or the label.

4.2 Most important symptoms and effects, both acute and delayed

In persons with sensitive skin or existing sensitisation to the fragrance components contained (in particular limonene, linalool, geraniol, citronellol, eugenol, coumarin), prolonged skin contact may cause allergic skin reactions.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment. No specific antidote known.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

The product is not flammable. Adapt extinguishing measures to the surroundings. Use extinguishing media suitable for the surrounding fire (e.g. water spray, foam, dry powder, carbon dioxide).

Unsuitable extinguishing media: none known.

5.2 Special hazards arising from the mixture

In the event of a surrounding fire, hazardous vapours may be formed. Combustion may produce: nitrogen oxides (NO_x), carbon monoxide (CO) and carbon dioxide (CO₂).

5.3 Advice for firefighters

Fight fire with usual precautions from a reasonable distance. Stay in the danger area only with self-contained breathing apparatus. Collect contaminated firefighting water separately. Do not allow it to enter drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Wear appropriate protective clothing. Avoid contact with eyes and skin. In the event of large spills, beware of slipping hazard.

For emergency responders:

Use personal protective equipment as specified in Section 8.

6.2 Environmental precautions

Prevent entry into drains, surface waters or groundwater. If product enters waterways or drains, notify the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment: Take up mechanically with absorbent material (sand, diatomaceous earth, universal binding agent).

For cleaning up: Place collected material into suitable, labelled containers for disposal. Thoroughly clean the affected area with water and ventilate.

6.4 Reference to other sections

Hazardous combustion products: see Section 5. PPE: see Section 8. Incompatible materials: see Section 10. Disposal information: see Section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Ensure good ventilation of the storage area and workplace. Avoid contact with skin, eyes and clothing. Avoid the formation of aerosols.

General hygiene advice for workplace:

Wash hands after use. Do not eat, drink or smoke in areas where the product is handled. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Keep container tightly closed. Protect from frost (do not freeze). Protect from direct sunlight. Recommended storage temperature: +5 °C to +25 °C.

Storage class (TRGS 510, Germany): 12 – Non-flammable liquids.

Incompatible substances or mixtures: Do not store with strong oxidisers, strong acids or strong bases.

7.3 Specific end use(s)

Microbiological cleaning agent for the deep removal of stains and odours from organic residues on absorbent materials (carpets, upholstery, mattresses, textiles). See Section 1.2.

SECTION 8: Exposure controls / personal protection**8.1 Control parameters**

The mixture does not contain substances at relevant concentrations subject to Workplace Exposure Limits (WELs) under the HSE publication EH40/2005 'Workplace Exposure Limits' (Health and Safety Executive, current edition).

DNEL / PNEC values: No relevant DNEL or PNEC values are available for the components at the concentrations present.

8.2 Exposure controls**Appropriate engineering controls:**

Technical measures and the application of suitable working procedures take precedence over the use of personal protective equipment. Ensure adequate ventilation.

Personal protective measures:

Eye/face protection: In case of risk of splashing, wear tight-fitting protective goggles (BS EN 166).

Hand protection:

Material type:	Nitrile rubber (NBR)
Material thickness:	≥ 0.11 mm

Breakthrough time:	> 480 min (protection index 6) – follow manufacturer's instructions
Standard:	BS EN ISO 374-1

Respiratory protection: Not required during normal use. In case of vapour or aerosol formation: filter type A (BS EN 14387).

Environmental exposure controls: Use appropriate containers to prevent environmental contamination. Prevent entry into drains, surface waters or groundwater.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	whitish-yellowish, cloudy
Odour:	camphor-like (characteristic)
Odour threshold:	no data available
pH (undiluted, 20 °C):	approx. 7.2 (variant with identical formulation); specification: 6.5 – 8.8
Melting/freezing point:	approx. -1 °C
Initial boiling point and range:	approx. 100 °C at 1013 hPa
Flash point:	not applicable (aqueous solution, non-flammable)
Evaporation rate:	no data available
Flammability:	non-flammable
Upper/lower explosive limits:	not applicable
Vapour pressure:	approx. 23 hPa at 20 °C (equivalent to water)
Density (20 °C):	approx. 1.01 g/ml
Relative vapour density:	no data available
Bulk density:	not applicable
Solubility in water:	fully miscible
Partition coefficient n-octanol/water (log KOW):	no data available
Auto-ignition temperature:	not applicable
Decomposition temperature:	no data available
Viscosity (kinematic, 20 °C):	similar to water, < 7 mm ² /s
Explosive properties:	none
Oxidising properties:	none
Particle characteristics:	not applicable (liquid product)

9.2 Other information

Aerobic mesophilic germs: approx. 10⁷ – 10⁸ CFU/g. Moulds: < 10 CFU/g. Pathogenic micro-organisms (Candida albicans, E. coli, Pseudomonas aeruginosa, Staphylococcus aureus): all negative.

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known under normal conditions of storage and use.

10.2 Chemical stability

The product is stable under normal ambient conditions and the temperature and pressure conditions expected during storage and handling.

10.3 Possibility of hazardous reactions

No hazardous reactions occur with proper handling and storage.

10.4 Conditions to avoid

Avoid frost (freezing) and prolonged heating above +30 °C, as this may impair the activity of the contained micro-organisms. Avoid direct sunlight.

10.5 Incompatible materials

Strong oxidisers, strong acids, strong bases and disinfectants may inactivate the micro-organisms.

10.6 Hazardous decomposition products

No hazardous decomposition products are expected during proper use, storage, spillage and heating.

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

No experimental toxicological data are available for the mixture as a whole. The following assessment was made based on component concentrations and the calculation rules of the CLP Regulation. Due to the low concentrations, the cut-off values for classification are not reached.

Acute toxicity (oral, dermal, inhalation):	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/skin sensitisation:	Classification criteria not met. In sensitised individuals, the contained fragrance components may cause allergic reactions.
Germ cell mutagenicity / Carcinogenicity / Reproductive toxicity:	Based on available data, the classification criteria are not met.
STOT-SE / STOT-RE:	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: The mixture does not contain substances with endocrine-disrupting properties at a concentration of ≥ 0.1 %.

Other effects: Prolonged or repeated skin contact may cause skin defatting.

SECTION 12: Ecological information**12.1 Toxicity**

No experimental ecotoxicological data are available for the mixture as a whole. Due to its composition and the low concentrations of the components, the mixture does not meet the criteria for classification as hazardous to the aquatic environment under Regulation (EC) No 1272/2008 (CLP). Classification under German water law (AwSV) is given in Section 15.

12.2 Persistence and degradability

The product is biodegradable. The contained non-ionic surfactants meet the criteria for ultimate aerobic biodegradation under Regulation (EC) No 648/2004 (Detergents Regulation). Phosphates are typically retained or eliminated in wastewater treatment plants.

12.3 Bioaccumulative potential

No significant bioaccumulation potential is expected.

12.4 Mobility in soil

Due to its miscibility with water, the product would be transported with soil water in the event of a release.

12.5 Results of PBT and vPvB assessment

The mixture does not contain components meeting the PBT or vPvB criteria of REACH Annex XIII.

12.6 Endocrine-disrupting properties

The mixture does not contain substances with endocrine-disrupting properties for the environment at a concentration of ≥ 0.1 %.

12.7 Other adverse effects

Avoid release into the environment. Water hazard class (WGK) under AwSV (Germany): WGK 1 – slightly hazardous to water (self-classification by the supplier in accordance with Annex 1 No 5 AwSV based on the concentrations of the components).

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product residues / unused product: Dispose of in accordance with Directive 2008/98/EC (Waste Framework Directive) and national/regional regulations.

Recommended European Waste Catalogue (EWC) code: 20 01 30 – Detergents other than those mentioned in 20 01 29 (household-type cleaners).

Disposal via wastewater: Do not release undiluted into drains. Diluted use solutions may be disposed of in normal household quantities via municipal wastewater.

Treatment of packaging: Completely emptied containers for recycling. Waste code 15 01 02 – plastic packaging.

SECTION 14: Transport information

The product is not subject to national or international transport regulations for dangerous goods (ADR/RID/ADN, IMDG, IATA-DGR).

14.1 UN number / ID:	not applicable – non-dangerous goods
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:	not environmentally hazardous under transport regulations (not a 'marine pollutant')
14.6 Special precautions for user:	No additional information available.
14.7 Maritime transport in bulk according to IMO instruments:	not applicable

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No 1907/2006 (REACH) as amended by Regulation (EU) 2020/878
- Regulation (EC) No 1272/2008 (CLP), as amended
- Regulation (EC) No 648/2004 on detergents, as amended
- Directive 2008/98/EC (Waste Framework Directive)
- Directive 2000/54/EC (biological agents)
- Restrictions under REACH Annex XVII: no restrictions exist for the components.
- List of substances subject to authorisation (REACH Annex XIV): none of the components is included in the current Annex XIV.
- SVHC Candidate List (REACH Art. 59(10)): the product does not contain SVHC substances at a concentration ≥ 0.1 % by weight.
- Regulation (EU) No 528/2012 on biocidal products: not applicable – the product does not fall under the Biocidal Products Regulation.

National regulations (United Kingdom – Great Britain):

- Note on jurisdiction: Following the UK's withdrawal from the European Union, the GB Classification, Labelling and Packaging of Chemical Substances and Mixtures Regulation (GB CLP) and UK REACH apply for products placed on the GB market (England, Wales, Scotland). For products placed on the Northern Ireland market, EU CLP and EU REACH continue to apply.
- This Safety Data Sheet uses EU references throughout, as the underlying technical data, hazard classifications and labelling provisions are identical to those under GB CLP. UK REACH-specific identifiers and registration numbers may need to be added by the GB-based importer prior to placing on the market.
- Health and Safety at Work etc. Act 1974
- Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended
- EH40/2005 Workplace Exposure Limits (HSE), current edition
- Voluntary submission of SDS to the National Poisons Information Service (NPIS) Birmingham via sds.npis@nhs.net is recommended.

National regulations (Germany, for information):

- Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV): water hazard class (WGK) 1 – slightly hazardous to water
- Technische Regeln für Gefahrstoffe (TRGS) 510: storage class 12 – Non-flammable liquids

15.2 Chemical safety assessment

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

SECTION 16: Other information**Full text of H-statements mentioned in Section 3:**

H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AwSV	German Ordinance on Installations for Handling Substances Hazardous to Water
CAS	Chemical Abstracts Service
CFU	Colony Forming Unit
CLP	Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging

COSHH	Control of Substances Hazardous to Health Regulations 2002 (UK)
DNEL	Derived No-Effect Level
EH40	HSE publication on Workplace Exposure Limits (UK)
EWC	European Waste Catalogue
GB CLP	Great Britain Classification, Labelling and Packaging Regulation
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HSE	Health and Safety Executive (UK)
INCI	International Nomenclature of Cosmetic Ingredients
NBR	Nitrile rubber
NHS	National Health Service (UK)
NPIS	National Poisons Information Service (UK)
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
UK REACH	UK Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation
vPvB	very Persistent and very Bioaccumulative
WEL	Workplace Exposure Limit (UK)
WGK	Water hazard class (Germany)

Reference sources:

- Regulation (EC) No 1907/2006 (REACH) as amended by Regulation (EU) 2020/878
- Regulation (EC) No 1272/2008 (CLP)
- Regulation (EC) No 648/2004 (Detergents Regulation)
- ECHA database – harmonised classifications
- LAVES analytical report, order no. 072312-000157, sample no. 07-52323-0423
- HSE EH40/2005 Workplace Exposure Limits, current edition

Classification method:

The classification of the mixture has been carried out using the calculation method of Regulation (EC) No 1272/2008 (CLP) on the basis of the component concentrations. Due to these concentrations, the cut-off values for classification are not reached for any hazard class.

Notes on changes:

This version (GHS 2.0 of 02.03.2026) supersedes version GHS 1.0 of 21.03.2022. Full adaptation to the requirements of Regulation (EU) 2020/878 (Annex II of REACH); supplementation of all subsections; correction of phosphates to E 340a and E 340b in line with the label; inclusion of non-ionic surfactants; correction of the water hazard class from 'not hazardous to water' to WGK 1 (slightly hazardous to water) on the basis of mixture calculation under Annex 1 No 5 AwSV; storage class updated from 13 to 12 in accordance with current TRGS 510.

Disclaimer:

The information contained in this safety data sheet is based on the present state of our knowledge and describes the product in terms of safety requirements. It does not represent any guarantee of the properties of the product. This safety data sheet has been prepared exclusively for this product and applies only to it. Compliance with applicable laws and regulations is the responsibility of the recipient of the product.