



SAFETY DATA SHEET
JANGRO KETTLE & SHOWER DESCALER BB024-50
According to Regulation (EC) No 2020/878, Annex II, as amended

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

1.1. Product identifier

Product name	JANGRO KETTLE & SHOWER DESCALER BB024-50
Product number	BB024-50
Internal identification	800-298-0001
Container size	500mL
UFI	UFI: 460A-X469-2Q73-GNKE

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

Identified uses	Descaler.
Uses advised against	Not for direct oral consumption in concentrated form. Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier	Jangro Limited Parklands 1A 3rd Floor Lostock Bolton BL6 4SD Tel. 01204 795955 Jangro (Europe) Ltd 6-9 Trinity Street, Dublin 2 D02 EY47 Ireland Tel.016177911
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Contact person For content of safety data sheet:, enquiries@jangrohq.net

1.4. Emergency telephone number

Emergency telephone +44 (0) 1204 795 955 (Jangro)

National emergency telephone number UK:

In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24
Ireland: For information or to report a poisoning incident contact The National Poisons Information Centre (01 8092166)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified

JANGRO KETTLE & SHOWER DESCALER BB024-50

Health hazards Skin Corr. 1 - H314 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H314 Causes severe skin burns and eye damage.

Precautionary statements

P102 Keep out of reach of children.

P264 Wash contaminated skin thoroughly after handling.

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

P260 Do not breathe vapour/ spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P310 Immediately call a POISON CENTER/ doctor.

P501 Dispose of contents/ container in accordance with local regulations.

Contains Citric Acid

Supplementary precautionary statements

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

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P404 Store in a closed container.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605). The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >0.1% published by the European Chemicals Agency (ECHA) under article 57 of the REACH regulation (as amended).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Citric Acid	10-30%
CAS number: 77-92-9	EC number: 201-069-1
Classification	
Eye Irrit. 2 - H319	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Provide eyewash station.

Inhalation Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

JANGRO KETTLE & SHOWER DESCALER BB024-50

Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Chemical burns must be treated by a physician. Rinse immediately with plenty of water. Remove contaminated clothing. Continue to rinse for at least 15 minutes and get medical attention.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

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

General information	Provide eyewash station.
Inhalation	Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.
Ingestion	Unlikely exposure route without abuse. Symptoms will include, Sickness, possible Irritation of GI Tract. A soapy taste may be reported.
Skin contact	Corrosive. Burns can occur. Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Risk of serious damage to eyes. The product is irritating to eyes and skin. Irritation and redness, followed by blurred vision. Corneal damage.

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

Notes for the doctor	No specific recommendations.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Foam, carbon dioxide or dry powder.
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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.
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5.3. Advice for firefighters

Protective actions during firefighting	Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	For personal protection, see Section 8. Treat the spilled material according to the instructions in the clean-up section. Take care as floors and other surfaces may become slippery.
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6.2. Environmental precautions

Environmental precautions	Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

JANGRO KETTLE & SHOWER DESCALER BB024-50

Methods for cleaning up Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing vapour/spray. Do not mix with other household chemical products. Do not mix with Bleach.

Advice on general occupational hygiene Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Use appropriate hand lotion to prevent defatting and cracking of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at room temperature. Keep out of the reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Citric Acid (CAS: 77-92-9)

DNEL	Available hazard data do not support the need for a DNEL to be established for other health effects.
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.44 mg/l - marine water; 0.044 mg/l - STP; >1000 mg/l - Sediment (Freshwater); 34.6 mg/kg - Sediment (Marinewater); 3.46 mg/kg - Soil; 33.1

8.2. Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate ventilation.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment that provides appropriate eye and face protection should be worn.

JANGRO KETTLE & SHOWER DESCALER BB024-50

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). Neoprene. Nitrile rubber. Polyethylene. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. A break through time of >60 minutes is suggested. Gloves should be inspected regularly for damage.
Other skin and body protection	Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate hand lotion to prevent defatting and cracking of skin.
Hygiene measures	Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection not required.
Environmental exposure controls	Avoid releasing into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless.
Odour	Unperfumed.
Odour threshold	Not applicable.
pH	pH (concentrated solution): 1-2
Melting point	Not determined.
Initial boiling point and range	No information available.
Flash point	This product does not sustain combustion. Not determined.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	The product is not flammable.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not applicable.
Relative density	1.035-1.045 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Agua ~ 1 mPa s @ 20°C

JANGRO KETTLE & SHOWER DESCALER BB024-50

Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	Not relevant.
Refractive index	8.5-9.5
Volatile organic compound	Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Under normal storage conditions this product is stable. Reactions with the following materials may generate heat: Alkalis. Alkali metals. Mixing with hypochlorite bleach based products will produce Toxic Chlorine gas.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Reacts with alkalis and generates heat. Reacts with chlorine/hypochlorite, sulphites, nitrites to produce toxic or corrosive gases. Mixing with Hypochlorite Bleach based products will produce toxic Chlorine gas.
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10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Avoid contact with Bleach and Alkaline materials.
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10.5. Incompatible materials

Materials to avoid	Do not mix with other household chemical products. Avoid contact with hypochlorite bleach products.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects	Information given is based on data of the components and of similar products.
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Acute toxicity - oral

Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
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Acute toxicity - dermal

Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
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Acute toxicity - inhalation

Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
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JANGRO KETTLE & SHOWER DESCALER BB024-50

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin. Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Not sensitising. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Not classified. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Does not contain any substances known to be mutagenic.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information

This product has low toxicity.

Inhalation

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.

Skin contact

Causes severe skin burns and eye damage. Prolonged or repeated exposure may cause the following adverse effects: Irritation. Redness. Dryness and/or cracking. Mild dermatitis, allergic skin rash.

Eye contact

May cause serious eye damage. Irritating to eyes. Severe irritation, burning, tearing and blurred vision. Corneal damage.

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).

11.2.2 Other information

None known

Toxicological information on ingredients.

Citric Acid

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 5,040.0
mg/kg)

JANGRO KETTLE & SHOWER DESCALER BB024-50

Species	Mouse
ATE oral (mg/kg)	5,040.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	2,001.0
Species	Rat
ATE dermal (mg/kg)	2,001.0

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product. Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

Ecological information on ingredients.

Citric Acid

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 48 hours: 440 and 760 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: 1535 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in The Detergents Regulations (as amended).

Ecological information on ingredients.

Citric Acid

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

Citric Acid

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: -1.72 REACH dossier information.

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

Ecological information on ingredients.

JANGRO KETTLE & SHOWER DESCALER BB024-50

Citric Acid

Mobility Soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine disrupting properties This product is not classified as, nor contains substances classed as having endocrine disrupting characteristics at levels >0.1% by weight (according to Regulation (EU) 2018/605).

Ecological information on ingredients.

Citric Acid

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

Citric Acid

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not discharge into drains or watercourses or onto the ground.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Normal use solutions are expected to be flushed to sewers. Reuse or recycle products wherever possible.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3265

UN No. (IMDG) 3265

UN No. (ICAO) 3265

UN No. (ADN) 3265

14.2. UN proper shipping name

Proper shipping name (ADR/RID) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS CITRIC ACID)

Proper shipping name (IMDG) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS CITRIC ACID)

Proper shipping name (ICAO) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS CITRIC ACID)

Proper shipping name (ADN) CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS CITRIC ACID)

14.3. Transport hazard class(es)

JANGRO KETTLE & SHOWER DESCALER BB024-50

ADR/RID class	8
ADR/RID classification code	C3
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

IMDG Code segregation group	1. Acids
EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

JANGRO KETTLE & SHOWER DESCALER BB024-50

National regulations	<p>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</p> <p>EH40/2005 Workplace exposure limits.</p> <p>The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).</p> <p>The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 696) (as amended).</p> <p>The Detergents Regulations 2010 (SI 2010 No. 740) (as amended). The Detergents (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 612) (as amended). The Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019 (SI 2019 No. 671) (as amended).</p> <p>The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).</p> <p>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).</p>
EU legislation	<p>European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (as amended)</p> <p>European Regulation (EC) No 1907/2006 - Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended)</p> <p>European Regulation (EC) No 648/2004 on detergents (as amended)</p>
Guidance	<p>Workplace Exposure Limits EH40.</p> <p>ECHA Guidance on the Application of the CLP Criteria.</p> <p>ECHA Guidance on the compilation of safety data sheets.</p> <p>COSHH Essentials.</p> <p>Technical Guidance WM2: Hazardous Waste.</p>

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>DNEL: Derived No Effect Level.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p>
Revision comments	<p>NOTE: Lines within the margin indicate significant changes from the previous revision. Note: Finished product SDS take their revision history from the parent bulk liquid SDS. The revision data will show that of the parent liquid. Review with no changes to classification</p>
Revision date	22/01/2024
Revision	4
Supersedes date	01/12/2022
SDS number	21744

JANGRO KETTLE & SHOWER DESCALER BB024-50

Hazard statements in full H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.
----- END OF SDS -----