



SAFETY DATA SHEET

Jangro Dishwash Rinse Aid

Compiled in Accordance with EU and GB REACH and CLP Regulations.

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

1.1. Product identifier

Product name	Jangro Dishwash Rinse Aid
Product number	BB086-5, BB086-10, BB086-20
Internal identification	800-239-0005; 800-234-0003; 800-232-0046
Container size	5 litres, 10 litres, 20 litres

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

Identified uses	Detergent. Dishwash final rinse additive.
Uses advised against	DO NOT use for hand dishwashing. Not for Oral Consumption. Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier	Jangro Ltd Jangro House Worsely Road, Farnworth Bolton, BL4 9LU Tel. 01204 795955
	Jangro (Europe) Ltd 6-9 Trinity Street, Dublin 2 D02 EY47 Ireland Tel.016177911

Contact person	For content of safety data sheet., enquiries@jangrohq.net
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1.4. Emergency telephone number

Emergency telephone	01204 795 955 (Jangro)
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National emergency telephone number	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)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

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Hazard statements	NC Not Classified
Precautionary statements	P102 Keep out of reach of children. P264 Wash hands thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/ attention. P501 Dispose of contents/ container in accordance with local regulations.
Detergent labelling	< 5% aliphatic hydrocarbons, < 5% non-ionic surfactants, Contains 2-Bromo-2-nitropropane-1, 3-diol

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ACETIC ACID	<1%
CAS number: 64-19-7	EC number: 200-580-7
Classification	
Flam. Liq. 3 - H226	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	
METHANOL	<1%
CAS number: 67-56-1	EC number: 200-659-6
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F;R11 T;R23/24/25,R39/23/24/25
Acute Tox. 3 - H301	
Acute Tox. 3 - H311	
Acute Tox. 3 - H331	
STOT SE 1 - H370	

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

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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.
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	Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists after washing.
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	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause eye irritation.

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.
For emergency responders	Wear self-contained breathing apparatus. Wear protective clothing, gloves, eye and face protection. Dilute with plenty of water. Do not allow uncontrolled discharge of product into the environment. Evacuate unnecessary personnel.

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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.

6.3. Methods and material for containment and cleaning up

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 acid.

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

Occupational exposure limits

ACETIC ACID

Short-term exposure limit (15-minute): WEL 20 ppm 50 mg/m³

Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

ACETIC ACID (CAS: 64-19-7)

DNEL

Workers - Inhalation; Long term local effects: 25 mg/m³

Workers - Inhalation; Short term local effects: 25 mg/m³

General population - Inhalation; Long term local effects: 25 mg/m³

General population - Inhalation; Short term local effects: 25 mg/m³

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PNEC	- Fresh water; 3.058 mg/l
	- marine water; 0.306 mg/l
	- Intermittent release; 30.58 mg/l
	- STP; 85 mg/l
	- Sediment (Freshwater); 11.36 mg/kg
	- Sediment (Marinewater); 1.136 mg/kg
	- Soil; 0.47 mg/kg

METHANOL (CAS: 67-56-1)

DNEL	Workers - Inhalation; Long term systemic effects: 130 mg/m ³
	Workers - Inhalation; Long term local effects: 130 mg/m ³
	Workers - Inhalation; Short term systemic effects: 130 mg/m ³
	Workers - Inhalation; Short term local effects: 130 mg/m ³
	Workers - Dermal; Long term systemic effects: 20 mg/kg/day
	Workers - Dermal; Short term systemic effects: 20 mg/kg/day
	General population - Inhalation; Long term systemic effects: 26 mg/m ³
	General population - Inhalation; Short term systemic effects: 26 mg/m ³
	General population - Inhalation; Long term local effects: 26 mg/m ³
	General population - Inhalation; Short term local effects: 26 mg/m ³
	General population - Dermal; Long term systemic effects: 4 mg/kg/day
	General population - Dermal; Short term systemic effects: 4 mg/kg/day
	General population - Oral; Long term systemic effects: 4 mg/kg/day
	General population - Oral; Short term systemic effects: 4 mg/kg/day

PNEC	Fresh water; 20.8 mg/l
	marine water; 2.08 mg/l
	STP; 100 mg/l
	Sediment (Freshwater); 77 mg/kg
	Sediment (Marinewater); 7.7 mg/kg
	Soil; 100 mg/kg

BRONOPOL (INN) (CAS: 52-51-7)

DNEL	Workers - Inhalation; Long term systemic effects: 4.1 mg/m ³
	Workers - Inhalation; Short term systemic effects: 12.3 mg/m ³
	Workers - Inhalation; Long term local effects: 4.2 mg/m ³
	Workers - Inhalation; Short term local effects: 4.2 mg/m ³
	Workers - Dermal; Long term systemic effects: 2.3 mg/kg/day
	Workers - Dermal; Short term systemic effects: 7 mg/kg/day
	Workers - Dermal; Long term local effects: 0.013 mg/cm ²
	Workers - Dermal; Short term local effects: 0.013 mg/cm ²
	General population - Inhalation; Long term systemic effects: 1.2 mg/m ³
	General population - Inhalation; Short term systemic effects: 3.7 mg/m ³
	General population - Inhalation; Long term local effects: 1.3 mg/m ³
	General population - Inhalation; Short term local effects: 1.3 mg/m ³
	General population - Dermal; Long term systemic effects: 1.4 mg/kg/day
	General population - Dermal; Short term systemic effects: 4.2 mg/kg/day
	General population - Dermal; Long term local effects: 0.008 mg/cm ²
	General population - Dermal; Short term local effects: 0.008 mg/cm ²
General population - Oral; Long term systemic effects: 0.35 mg/kg/day	
General population - Oral; Short term systemic effects: 1.1 mg/kg/day	

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PNEC

- Fresh water; 0.01 mg/l
- marine water; 0.008 mg/l
- Intermittent release; 0.0025 mg/l
- STP; 0.43 mg/l
- Sediment (Freshwater); 0.041 mg/kg
- Sediment (Marinewater); 0.00328 mg/kg
- Soil; 0.5 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Personal protection

Data provided here is not a risk/COSHH assessment. It relates to the product as supplied and should be used in developing a risk/COSHH assessment.

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.

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	Blue.
Odour	Mild.
Odour threshold	Not applicable.
pH	pH (concentrated solution): >2.5
Melting point	Not applicable.
Flash point	>60°C Closed cup.

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Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.010 typically @ @20°C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	No information available.
Explosive properties	Not applicable
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Under normal storage conditions this product is stable.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products No known hazardous decomposition products.

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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.
<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	46,382.19
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	102,040.82
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	1,020.41
ATE inhalation (dusts/mists mg/l)	139.15
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not classified. Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met. Calculation method.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Not classified. Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Does not contain any substances known to be mutagenic.
<u>Carcinogenicity</u>	
Carcinogenicity	Does not contain any substances known to be carcinogenic.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Does not contain any substances known to be toxic to reproduction.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
General information	This product has low toxicity.
Inhalation	Considered to be a low inhalation hazard at normal workplace temperatures.
Ingestion	May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.
Skin contact	Skin irritation should not occur when used as recommended. Prolonged or repeated exposure may cause the following adverse effects: Irritation. Redness. Dryness and/or cracking. Mild dermatitis, allergic skin rash.

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Eye contact May be slightly irritating to eyes. Irritation of eyes and mucous membranes.

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.

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).

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not applicable.

12.4. Mobility in soil

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

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. Other adverse effects

Other adverse effects None known.

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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
EH40/2005 Workplace exposure limits.
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019 (as amended).
The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
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).
The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019 No. 696) (as amended).
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).

EU legislation

European Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (as amended)
Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) 1907/2006, System of specific information relating to Dangerous Preparations. 2001/58/EC.

Guidance

Workplace Exposure Limits EH40.
ECHA Guidance on the Application of the CLP Criteria.
ECHA Guidance on the compilation of safety data sheets.
COSHH Essentials.
Technical Guidance WM2: Hazardous Waste.

15.2. Chemical safety assessment

No information available.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	DNEL: Derived No Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
Revision comments	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. Additional pack size Review of SDS with no change of classification.
Revision date	22/11/2022
Revision	9
Supersedes date	02/11/2022
SDS number	23197
Risk phrases in full	Not classified. R11 Highly flammable. R22 Harmful if swallowed. R36 Irritating to eyes. R41 Risk of serious damage to eyes. R67 Vapours may cause drowsiness and dizziness.
Hazard statements in full	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H331 Toxic if inhaled. H370 Causes damage to organs .

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 -----