

SAFETY DATA SHEET

METRO Huuhtelukirkaste

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	31.05.2022
Revision date	31.03.2022

1.1. Product identifier

Product name	METRO Huuhtelukirkaste
Article no.	32. 1000000582
GTIN No.	6430075665806
Product definition	Rinse Aid for machine dishwashing

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

Use of the substance / preparation	Rinse Aid for machine dishwashing
Main intended use	PC-DET-3.2 Automatic dishwashing detergents - professional or industrial use
Professional use	Yes
Consumer use	No

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name	Berner Ltd/Pro
Office address	Hitsaajankatu 24
Postal address	P.O.Box 22
Postcode	00811
City	Helsinki
Country	Finland
Telephone number	+3582079100
Email	pro@berner.fi

1.4. Emergency telephone number

Emergency telephone	Telephone number: 112
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Description: Emergency phone number in the EU,
HUS Myrkytystietokeskus 24/7 phone 0800 147 111 (or 09 471977) in Finland

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Skin Irrit. 2; H315
Substance / mixture hazardous properties	Causes serious eye irritation.

2.2. Label elements

Hazard pictograms (CLP)



Signal word	Warning
Hazard statements	H315 Causes skin irritation.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P332+P313 If skin irritation occurs: Get medical advice / attention.
Special supplemental label information mixtures	-

2.3. Other hazards

PBT / vPvB	-
Other hazards	-

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Composition type	Mixture			
Substance	Identification	Classification	Contents	Notes
Alkoxylated Amine	REACH Reg. No.: 02-2119549453-36-xxxx	Skin Irrit. 2; H315	15 - 20 %	
Hexanol, ethoxylated	CAS No.: 31726-34-8	Acute Tox. 4; H302 Eye Dam. 1; H318	5 - 8 %	
isopropanol	CAS No.: 67-63-0 EC No.: 200-661-7 Index No.: 603-117-00-0 REACH Reg. No.: 01-2119457558-25-xxxx	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	1 - 5 %	
Description of the mixture	Contains: 15-30 % Non-ionic surfactants			
Remarks, substance	SCL: Hexanol, ethoxylated (Cas. no 31726-34-8); ≤ 15% no classification for eye effects			

> 15% Eye Irrit. Cat. 2 (H319)

SECTION 4: First aid measures

4.1. Description of first aid measures

General	-
Inhalation	Move to fresh air.
Skin contact	Wash off with soap and plenty of water. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth with water and drink milk or water. If symptoms persist, call a physician. or if large quantities of this product are swallowed.

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

General symptoms and effects

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

Medical treatment Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use foam, CO2, powder or waterspray.
Improper extinguishing media	-

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards No known.

5.3. Advice for firefighters

Personal protective equipment Self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Environmental precautionary measures Try to prevent the material from entering drains or water courses.

6.3. Methods and material for containment and cleaning up

Clean up Small quantities may be flushed to drains with plenty of water. Large amounts

Absorb with sand or other inert absorbent. Do not absorb in sawdust or other combustible materials.

6.4. Reference to other sections

Other instructions For suitable protective equipment, see section 8.
Dispose of waste, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage Store in closed original container at temperatures between 0°C and 30°C.

7.3. Specific end use(s)

Specific use(s)

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SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Substance	Identification	Exposure limits	TWA Year
isopropanol	CAS No.: 67-63-0	Limit value (8 h) : 200 ppm Limit value (8 h) : 500 mg/ m ³ Limit value (short term) Value: 250 ppm Limit value (short term) Value: 620 mg/m ³	

8.2. Exposure controls

Eye / face protection

Required Properties Wear approved, tight fitting safety glasses where splashing is probable.

Hand protection

Skin- / hand protection, long term contact Use suitable protective gloves if risk of skin contact.

Required properties for hand protection Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

Skin protection

Suitable protective clothing Wear apron or protective clothing in case of contact.

Respiratory protection

Respiratory protection, general No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	blue
Odour	characteristic
pH	Status: In delivery state Comments: 6,7
Boiling point / boiling range	Comments: n.100°C
Relative density	Comments: n. 1016 kg/m ³
Solubility	Medium: Water Comments: soluble

9.2. Other information

Other physical and chemical properties

Physical and chemical properties -

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under normal conditions.

10.2. Chemical stability

Stability Stable at normal ambient temperature and pressure.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Conditions to avoid Stable under normal conditions.

10.5. Incompatible materials

Materials to avoid -

10.6. Hazardous decomposition products

Hazardous decomposition products No hazards to be specially mentioned.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Effect tested: LD50
 Route of exposure: Oral
 Value: > 5000 mg/kg
 Species: Rat
 Comments: Alkoxylated Amine

Effect tested: LD50
 Route of exposure: Oral
 Value: > 300 - 2000 mg/kg
 Species: Rat
 Comments: Hexanol, ethoxylated

Effect tested: LD50
 Route of exposure: Oral
 Value: > 2000 mg/kg
 Species: Rat
 Comments: Isopropanol

Effect tested: LC50
 Route of exposure: Inhalation.
 Duration: 8 hour(s)
 Value: > 20 mg/l
 Species: Rat
 Comments: Isopropanol

Other information regarding health hazards

Assessment of acute toxicity, classification

LD50/oral/rat >5000 mg/kg (according to data from raw materials)

Assessment of skin corrosion / irritation, classification

Irritating to skin.

Assessment of germ cell mutagenicity, classification

Based on available data the classification criteria are not met.

Assessment of carcinogenicity, classification

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

Assessment of reproductive toxicity, classification

Based on available data the classification criteria are not met.

11.2 Other information

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity, fish

Value: > 100 mg/l
 Effect dose concentration: LC50
 Test duration: 96 hour(s)
 Species: Leuciscus idus
 Comments: Alkoxylated Amine

Value: > 100 mg/l
 Effect dose concentration: LC50

Ecotoxicity

Test duration: 96 hour(s)
 Species: Brachydanio rerio
 Comments: Hexanol, ethoxylated

Value: > 100 mg/l
 Effect dose concentration: LC50
 Exposure time: 48 hour(s)
 Species: Leuciscus idus melanotus,
 Comments: Isopropanol

Not classified as dangerous to the environment.

12.2. Persistence and degradability

Persistence and degradability
 description/evaluation

Surfactants are readily biodegradable (OECD-tests)

12.3. Bioaccumulative potential

Bioaccumulation, evaluation

Not expected to be bioaccumulative.

12.4. Mobility in soil

Mobility

Mobile liquid. Soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB
 assessment

This product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

12.7. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal
 for the chemical

Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: Transport information

Dangerous goods

No

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user**14.7. Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

Legislation and regulations	648/2004/EY
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15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H225 Highly flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
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Recommended restrictions on use	Only for professional use.
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Additional information	Manufacturer and the label of the product.
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Key literature references and sources for data	REACH and CLP MSDS of the raw materials.
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Version	1
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