

Safety data sheet according to 1907/2006/EC, Article 31

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Printing date: 04.04.2022 Revision: 04.04.2022 Version number 2.1

	lentification of the substance/mixture and of the company/undertaking
1.1 Product ide	
Identification o	of the substance/preparation: Evoca Descaler
Application of	entified uses of the substance or mixture and uses advised against the substance / the mixture Descaler against No further relevant information available.
Company/under ORO-Produkte Im Hengstfeld 4 D-32657 Lemgo phone +49 (0)52 fax +49 (0)5261 Distributor: Evoca S.p.A. Via Roma 24 24030 Valbremi Bergamo, Italy www.evocagrou Further inform Quality manage	261 28893-0 28893-48 bo up.com ation obtainable from: ment department
	o-marketing.de, www.oro-marketing.de
1.4 Emergency	telephone number: Tel. +49 (0)5261 28893-0 (during office hours,
Mon-Fri 8 a.m.	- 4 p.m.)
SECTION 2: H	azards identification
2.1 Classificat	azards identification ion of the substance or mixture according to Regulation (EC) No 1272/2008
2.1 Classificat Classification	ion of the substance or mixture
2.1 Classificat Classification GHS05	ion of the substance or mixture according to Regulation (EC) No 1272/2008
2.1 Classification Classification GHS05 Skin Corr. 1C	ion of the substance or mixture according to Regulation (EC) No 1272/2008 corrosion
2.1 Classification Classification GHS05 Skin Corr. 1C I Eye Dam. 1 I 2.2 Label elem Labelling acco The product is of Hazard pictog Signal word D	ion of the substance or mixture according to Regulation (EC) No 1272/2008 corrosion H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. Ha18 Causes serious eye damage. Hants Drding to Regulation (EC) No 1272/2008 classified and labelled according to the CLP regulation. rams GHS05
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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P310 P405 Store locked up. P501 Dispose of contents and container to problem waste disposal. 2.3 Other hazards

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Cleansing agent

Dangerous components:			
CAS: 5949-29-1 EC number: 691-328-9 Reg.nr.: 01-2119457026-42	Citric acid	♦ Eye Irrit. 2, H319	10-25%
CAS: 79-33-4 EINECS: 201-196-2 Reg.nr.: 01-2119474164-39	L-Lactic acid	♦ Skin Corr. 1C, H314; Eye Dam. 1, H318	5-<10%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Immediately remove any clothing soiled by the product. Protective gloves After inhalation: Supply fresh air; consult doctor in case of complaints. After skin contact: Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing: Rinse out mouth and then drink plenty of water. Get medical advice/attention if you feel unwell. 4.2 Most important symptoms and effects, both acute and delayed Causes serious eye damage. 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents: Water haze Fire-extinguishing powder Foam For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture Danger of forming toxic pyrolysis products. Carbon oxides (COx)

5.3 Advice for firefighters Protective equipment: Wear fully protective suit. Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Avoid contact with the eyes.

6.2 Environmental precautions:

Prevent from spreading (e.g. by damming-in or oil barriers). Do not allow to reach ground water/water course. Do not allow undiluted product or large quantities of it to reach sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Observe information on the label and follow instructions for use. See Section 8 for information on personal protection equipment. Avoid contact with the eyes. **Information about fire - and explosion protection:** No special precautions are necessary if used correctly.

7.2 Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility:
Store away from foodstuffs.
Observe the notes from TRGS 510 regarding joint storage of hazardous substances.
Further information about storage conditions:
Protect from heat and direct sunlight.

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Keep out of reach of children. **Storage class:** 12

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Exposure limit values:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

PNECs

PNECS		
CAS: 5949-29-1 Citric acid		
Water 0,44 mg/l (Fresh water)		
	0,044 mg/l (Marine water)	
Sewage treatment plant (STP) 1.000 mg/l (Microorganisms)		
Sediment	34,6 mg/kg dw (Fresh water)	
	3,46 mg/kg dw (Marine water)	
Soil	33,1 mg/kg soil dw (Soil)	
Additional information: The I	ists valid during the making were used as basis.	
8.2 Exposure controls		
	trols No further data; see item 7.	
General protective and hygie	enic measures:	
	ures are to be adhered to when handling chemicals.	
Respiratory protection:	tive device in case of insufficient ventilation.	
Filter A-P1		
Hand protection		
Protective gloves		
	cleaning agents and skin cosmetics.	
Material of gloves Nitrile rubb	er, NBR Iterial Value for the permeation: Level 6	
	loves made of the following materials are suitable:	
Nitrile rubber, NBR		
Recommended thickness of th		
Value for the permeation: Leve		
The exact break trough time ha	as to be found out by the manufacturer of the protective gloves and has to	
	oves does not only depend on the material, but also on further marks of	
quality and varies from manufa	cturer to manufacturer. As the product is a preparation of several	
	he glove material can not be calculated in advance and has therefore to	
be checked prior to the applica		
Body protection: Not required	oggles according to EN 166 (i.e. goggles with side shields)	
	itrols Follow instructions for use, dosage and waste disposal.	
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SECTION 9: Physical and chemical properties	
9.1 Information on basic physical and chemica	al properties
Colour:	Clear
Odour:	Recognisable
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling	
range	Undetermined.
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	Product is not selfigniting.
Decomposition temperature:	Not determined.
pH at 20 °C	1-1,8
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value	
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1,097-1,107 g/cm³
Relative density	Not determined.
Vapour density	Not determined.
· ·	
9.2 Other information	
Appearance: Form:	Fluid
Important information on protection of health	Fluiu
and environment, and on safety.	
Explosive properties:	Product doos not prosont an explosion bazard
Solvent content:	Product does not present an explosion hazard.
	0 % (1999/13/EG)
VOC (EC) Change in condition	0 % (1999/13/EG)
Evaporation rate	Not determined.
•	
Information with regard to physical hazard	
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
	Void Void Void



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Self-heating substances and mixtures	Void	
Substances and mixtures, which emit		
flammable gases in contact with water	Void	
Oxidising liquids	Void	
Oxidising solids	Void	
Organic peroxides	Void	
Corrosive to metals	Void	
Desensitised explosives	Void	

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid Protect from heat and direct sunlight.

10.5 Incompatible materials: strong alkalis

strong oxidising agents

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide Maleic anhydride

-

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

LD/LC50 values relevant for classification:

CAS: 5949-29-1 Citric acid

Oral LD₅₀ 5.400 mg/kg/bw (Mouse)

Dermal LD_{50} >2.000 mg/kg/bw (Rat)

Inhalative ATE >5 (unspecified)

CAS: 79-33-4 L-Lactic acid

Oral	LD_{50}	3.543 mg/kg/bw (Rat) (EPA OPP 81-1)
	30	

Dermal LD₅₀ >2.000 mg/kg/bw (Rat) (EPA OPP 81-2)

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met. **Germ cell mutagenicity** Based on available data, the classification criteria are not met. **Carcinogenicity** Based on available data, the classification criteria are not met. **Reproductive toxicity** Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met. **STOT-repeated exposure** Based on available data, the classification criteria are not met.

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

Information on likely routes of exposure

Ingestion: Corrosive effect on mucous membranes. Inhalation: Coughing May cause respiratory irritation. Skin Contact: Causes severe skin burns Eye Contact: Causes serious eye damage. 11.2 Information on other hazards Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

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

CAS: 5949-29-1 Citric acid

LC₅₀/96h 440-760 mg/l (Fish) (OECD 203)

- EC₅₀/72h 120 mg/l (Daphnia magna)
- NOEC 425 mg/l (Algae)

CAS: 79-33-4 L-Lactic acid

LC₅₀/96h 195 mg/l (Danio rerio) (OECD 203)

EC₅₀/48h 130 mg/l (Daphnia magna) (OECD 202)

EC₅₀/72h >2.800 mg/l (Pseudokirchneriella subcapitata) (OECD 201)

NOEC/96h 180 mg/l (Danio rerio) (OECD 203)

12.2 Persistence and degradability

CAS: 5949-29-1 Citric acid

Biodegradability 97 % (28d) (OECD 301 B)

CAS: 79-33-4 L-Lactic acid

Biodegradability >60 % (28d)

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.



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12.7 Other adverse effects

Behaviour in sewage processing plants:

Technically correct releases of minimal concentrations to adapted biological sewage plants, will not disturb the biodegradability of activated sludge. Before allowing large quantities to be fed into sewage plants, obtain the approval of the responsible authorities.

Other information:

General information:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow to reach ground water/water course. Do not allow undiluted product or large quantities of it to reach sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

European waste catalogue

20 01 29* detergents containing hazardous substances

15 01 02 plastic packaging

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations. Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14.1 UN number or ID number ADR/RID, IMDG, IATA	UN3265
14.2 UN proper shipping name	
ADR/RID	Void
IMDG	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S
ΙΑΤΑ	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S (containing L-(+)-lactic acid)
14.3 Transport hazard class(es)	
ADR/RID	
\mathbf{V}	
Class	8 (3265) Corrosive substances.



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Label	8
IMDG, IATA	
Class	8 Corrosive substances.
Label	8
14.4 Packing group ADR/RID, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user	Warning: Corrosive substances.
14.7 Maritime transport in bulk according instruments	to IMO Not applicable.
Transport/Additional information:	
ADR/RID Limited quantities (LQ) Excepted quantities (EQ)	5l Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	Ē
IMDG Limited quantities (LQ)	51
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

Labelling according to EC guidelines: Regulation (EC) No 648/2004 on detergents / Labelling for contents Contains no substances, which require labeling according to Regulation (EC) No 648/2004

Directive 2012/18/EU Not applicable

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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Regulation (EU) No 649/2012

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

National regulations:

Other regulations, limitations and prohibitive regulations Other regulations (EC): Directive 98/24/EEC Other regulations (EC): Regulation (EC) No 648/2004

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation.

Training hints Make sure that users are appropriately informed, instructed and trained.

Classification according to Regulation (EC) No 1272/2008 Calculation method Department issuing SDS: Quality management department Version number of previous version: 2.0

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative EC50: effective concentration, 50 percent OECD: Organization for Economic Co-operation and Development ADN: Accord européen relativ au transport international des marchandises dangereuses par voie de navigation intérieure IBC: Intermediate bulk container MARPOL: Marine Pollution Skin Corr. 1C: Skin corrosion/irritation - Category 1C Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

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Sources Safety data sheet for raw materials, eur-lex.europa.eu, echa.europa.eu * Data compared to the previous version altered.

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