

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

ECOAT Reiniger HMT 630

Version number: 1.0

First version: 2021-07-02

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

 1.1
 Product identifier

 Trade name
 ECOAT Reiniger HMT 630

 Registration number (REACH)
 Not relevant (mixture).

 CAS number
 not relevant (mixture)

 Unique formula identifier (UFI)
 KJW3-DK66-P20A-YM5E.

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

Relevant identified uses Uses advised against Acid cleaner

Do not use for squirting or spraying Do not use for products which come into direct contact with the skin

1.3 Details of the supplier of the safety data sheet

gewa Gesellschaft für Wasseraufbereitung Ab-	Telephone: +49 (0) 2064 40556
wasser- und Chemietechnik mbH	Telefax: +49 (0) 2064 40556
Kleiststr. 36a	e-mail: info@gewa.com
D-46539 Dinslaken	Website: www.gewa.com
Germany	

e-mail (competent person)

info@gewa.com

1.4 Emergency telephone number

As above or nearest toxicological information centre.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Classification								
Section	Hazard class	Category	Hazard class and category	Hazard state- ment				
3.2	skin corrosion/irritation	1	Skin Corr. 1	H314				
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318				

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word	danger
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Pictograms

GHS05



Hazard statements

H314 C

Causes severe skin burns and eye damage.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container in accordance with local/regional/national/interna- tional regulations.

Supplemental hazard information

EUH071	Corrosive to the respiratory tract.
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Hazardous ingredients for labelling	glycolic acid
	formic acid
	acetic acid

2.3 Other hazards

This material is combustible, but will not ignite readily.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

Description of the mixture

Hazardous ingredients									
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes				
2-(2- butoxyethoxy)ethan- ol	CAS No 112-34-5	50 - < 75	Eye Irrit. 2 / H319	(!)	GHS-HC IOELV				
	EC No 203-961-6								
	Index No 603-096-00-8								
	REACH Reg. No 01-2119475104- 44-xxxx								
formic acid	CAS No 64-18-6	5-<10	Flam. Liq. 3 / H226 Acute Tox. 4 / H302 Acute Tox. 3 / H331		B(a) GHS-HC IOELV				
	EC No 200-579-1		Skin Corr. 1A / H314 Eye Dam. 1 / H318						
	Index No 607-001-00-0								
glycolic acid	CAS No 79-14-1	5 - < 10	Acute Tox. 4 / H332 Skin Corr. 1B / H314 Eye Dam. 1 / H318		-				
	EC No 201-180-5								
acetic acid	CAS No 64-19-7	5 - < 10	Flam. Liq. 3 / H226 Skin Corr. 1A / H314 Eye Dam. 1 / H318		B(a) GHS-HC IOELV				
	EC No 200-580-7				ICLEV				
	Index No 607-002-00-6								

Notes

B(a): The classification refers to an aqueous solution

GHS- Harmonised classification (the classification of the substance corresponds to the entry in the list according toHC: 1272/2008/EC, Annex VI)

IOELV: Substance with a community indicative occupational exposure limit value

Name of substance	Specific Conc. Limits	M-Factors	ΑΤΕ	Exposure route
formic acid	Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 10 % ≤ C < 90 % Skin Irrit. 2; H315: 2 % ≤ C < 10 % Eye Dam. 1; H318: C ≥ 10 % Eye Irrit. 2; H319: 2 % ≤ C < 10 %	-	730 ^{mg} / _{kg} 7.85 ^{mg} / _l /4h	oral inhalation: vapour
glycolic acid	-	-	3.6 ^{mg} / _l /4h	inhalation: dust/ mist
acetic acid	Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Dam. 1; H318: C ≥ 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %	-	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Take off immediately all contaminated clothing. Remove affected person from the danger area and lay down. Do not leave affected person unattended. Self-protection of the first aider.

Following inhalation

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Call a physician immediately. Causes poorly healing wounds.

Following eye contact

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive to skin. Seriously damaging to the eye. Corrosive to the respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO2)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

use suitable breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area. Avoid contact with skin and eyes. Do not breathe vapour/spray. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation. Do not get in eyes, on skin, or on clothing. Do not breathe vapour/spray. Handle and open container with care. When diluting, always stir the product into standing water.

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Keep away from sources of ignition - No smoking.

Specific notes/details

None.

Handling of incompatible substances or mixtures

Do not mix with alkali.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas. Wash hands after use. Preventive skin protection (barrier creams/ointments) is recommended. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

frost

Consideration of other advice

Keep away from food, drink and animal feeding stuffs.

Ventilation requirements

Provision of sufficient ventilation.

Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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Occup	Occupational exposure limit values (Workplace Exposure Limits)								
Coun- try	Name of agent	CAS No	Identi- fier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Nota- tion	Source
EU	2-(2-butoxyeth- oxy)ethanol	112-34-5	IOELV	10	67.5	15	101.2	-	2006/15/EC
EU	formic acid	64-18-6	IOELV	5	9	-	-	-	2006/15/EC
EU	acetic acid	64-19-7	IOELV	10	25	20	50	-	2017/164/ EU
GB	2-(2-butoxyeth- oxy)ethanol	112-34-5	WEL	10	67.5	15	101.2	-	EH40/2005
GB	formic acid	64-18-6	WEL	5	9.6	-	-	-	EH40/2005
GB	acetic acid	64-19-7	WEL	10	25	20	50	-	EH40/2005

Notation

STEL

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture									
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time			
2-(2- butoxyethoxy)eth- anol	112-34-5	DNEL	67.5 mg/ m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
formic acid	64-18-6	DNEL	9.5 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
glycolic acid	79-14-1	DNEL	57.69 mg/ kg bw/day	human, dermal	worker (industry)	chronic - system- ic effects			
glycolic acid	79-14-1	DNEL	1.53 mg/ m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			
glycolic acid	79-14-1	DNEL	10.56 mg/ m³	human, inhalat- ory	worker (industry)	chronic - system- ic effects			
acetic acid	64-19-7	DNEL	25 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects			

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment
2-(2-butoxyethoxy)ethanol	112-34-5	PNEC	1.1 ^{mg} / _l	freshwater
2-(2-butoxyethoxy)ethanol	112-34-5	PNEC	0.11 ^{mg} / _l	marine water
2-(2-butoxyethoxy)ethanol	112-34-5	PNEC	4.4 ^{mg} / _{kg}	freshwater sediment
2-(2-butoxyethoxy)ethanol	112-34-5	PNEC	0.44 ^{mg} / _{kg}	marine sediment
2-(2-butoxyethoxy)ethanol	112-34-5	PNEC	0.32 ^{mg} / _{kg}	soil
formic acid	64-18-6	PNEC	2 ^{mg} / _l	freshwater
formic acid	64-18-6	PNEC	0.2 ^{mg} / _l	marine water
formic acid	64-18-6	PNEC	7.2 ^{mg} / _l	sewage treatment plant (STP)
formic acid	64-18-6	PNEC	13.4 ^{mg} / _{kg}	freshwater sediment
formic acid	64-18-6	PNEC	1.34 ^{mg} / _{kg}	marine sediment
formic acid	64-18-6	PNEC	1.5 ^{mg} / _{kg}	soil
glycolic acid	79-14-1	PNEC	0.011 ^{mg} / _{kg}	marine sediment
glycolic acid	79-14-1	PNEC	0.031 ^{mg} / _l	freshwater
glycolic acid	79-14-1	PNEC	0.003 ^{mg} / _l	marine water

Relevant PNECs of components of the mixture									
Name of substance	CAS No	Endpoint	Threshold level	Environmental com- partment					
glycolic acid	79-14-1	PNEC	7 ^{mg} /l	sewage treatment plant (STP)					
glycolic acid	79-14-1	PNEC	0.115 ^{mg} / _{kg}	freshwater sediment					
glycolic acid	79-14-1	PNEC	0.011 ^{mg} / _{kg}	marine sediment					
glycolic acid	79-14-1	PNEC	0.007 ^{mg} / _{kg}	soil					
acetic acid	64-19-7	PNEC	3.058 ^{mg} / _l	freshwater					
acetic acid	64-19-7	PNEC	0.306 ^{mg} / _l	marine water					
acetic acid	64-19-7	PNEC	85 ^{mg} /l	sewage treatment plant (STP)					
acetic acid	64-19-7	PNEC	11.36 ^{mg} / _{kg}	freshwater sediment					
acetic acid	64-19-7	PNEC	1.136 ^{mg} / _{kg}	marine sediment					
acetic acid	64-19-7	PNEC	0.47 ^{mg} / _{kg}	soil					
2-(2-butoxyeth	2-(2-butoxyethoxy)ethanol: PNEC Oral - Predators - Secondary poisoning - 56 mg/kg								

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Wear suitable protective clothing.

Eye/face protection

Wear eye/face protection.

Hand protection

Protective gloves

Material	Material thickness	Breakthrough times of the glove material
CR: chloroprene (chlorobutadiene) rubber	≥ 0,65 mm	>480 minutes (permeation: level 6)
NBR: acrylonitrile-butadiene rubber	≥ 0,65 mm	>480 minutes (permeation: level 6)
Nitrile	≥ 0,4 mm	>480 minutes (permeation: level 6)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	not determined
Flash point	>60 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	1.1 – 1.5
Kinematic viscosity	not determined
Dynamic viscosity	not determined
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient n-octanol/water (log value)	not determined
Vapour pressure	not determined

Density and/or relative density

	Density	1 – 1.04 ^g / _{cm³}
	Relative vapour density	information on this property is not available
	Particle characteristics	not relevant (liquid)
9.2	Other information	
	Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
	Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Strong exothermic reaction with strong alkalis.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

oxidisers

Release of flammable materials with:

light metals (due to the release of hydrogen in an acid/alkaline medium)

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Classification procedure

If not otherwise specified the classification is based on: Ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Test data are not available for the complete mixture.

Acute toxicity estimate (ATE) of components of the mixture					
Name of substance	CAS No	Exposure route	ATE		
formic acid	64-18-6	oral	730 ^{mg} / _{kg}		
formic acid	64-18-6	inhalation: vapour	7.85 ^{mg} / _l /4h		
glycolic acid	79-14-1	inhalation: dust/mist	3.6 ^{mg} /ı/4h		

Name of substance	CAS No	Expos- ure route	End- point	Value	Species	Method	Source
2-(2-butoxyethoxy)ethan- ol	112-34-5	oral	LD50	2,410 ^{mg} / _{kg}	mouse, male	OECD Guideline 401	ECHA
2-(2-butoxyethoxy)ethan- ol	112-34-5	dermal	LD50	2,764 ^{mg} / _{kg}	rabbit, male	OECD Guideline 402	ECHA
formic acid	64-18-6	oral	LD50	730 ^{mg} / kg	rat	OECD Guideline 401	ECHA
formic acid	64-18-6	inhala- tion: va- pour	LC50	7.85 ^{mg} / _l /4h	rat	OECD Guideline 403	ECHA
glycolic acid	79-14-1	oral	LD50	2,040 ^{mg} / _{kg}	rat	EPA OPP 81- 1	ECHA
glycolic acid	79-14-1	inhala- tion: dust/ mist	LC50	3.6 ^{mg} / _l / 4h	rat, male	OECD Guideline 403	ECHA
glycolic acid	79-14-1	inhala- tion: dust/ mist	LC50	>5.2 ^{mg} / _l /4h	rat, fe- male	OECD Guideline 403	ECHA
acetic acid	64-19-7	oral	LD50	3,310 ^{mg} / _{kg}	rat	-	ECHA

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Classification procedure

The classification is based on an extreme pH value.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitisation

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Reproductive toxicity

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - single exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Corrosive to the respiratory tract.

11.2 Information on other hazards

There is no additional information.

Endocrine disrupting properties

None of the ingredients are listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Test data are not available for the complete mixture.

Aquatic toxicity (acute) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
2-(2-butoxyeth- oxy)ethanol	112-34-5	LC50	96 h	1,300 ^{mg} / _l	bluegill (Lepomis mac- rochirus)	OECD Guideline 203	ECHA
2-(2-butoxyeth- oxy)ethanol	112-34-5	EC50	48 h	>100 ^{mg} /l	daphnia magna	EU method C.2	ECHA
2-(2-butoxyeth- oxy)ethanol	112-34-5	ErC50	72 h	1,101 ^{mg} / _l	algae (pseudokirch- neriella subcap- itata)	OECD Guideline 201	ECHA
2-(2-butoxyeth- oxy)ethanol	112-34-5	EbC50	96 h	>100 ^{mg} / _l	algae (Desmod- esmus sub- spicatus)	OECD Guideline 201	ECHA
formic acid	64-18-6	EC50	48 h	365 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA
formic acid	64-18-6	LC50	96 h	130 ^{mg} / _l	zebra fish (Danio rerio)	OECD Guideline 203	ECHA
formic acid	64-18-6	LC50	96 h	1,308 ^{mg} / _l	Crangon cran- gon	-	ECHA
formic acid	64-18-6	ErC50	72 h	1,240 ^{mg} / _l	algae (pseudokirch- neriella subcap- itata)	OECD Guideline 201	ECHA
glycolic acid	79-14-1	LC50	96 h	164 ^{mg} / _l	fathead min- now (Pimephales promelas)	-	ECHA
glycolic acid	79-14-1	EC50	48 h	141 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA
acetic acid	64-19-7	LC50	96 h	>300.8 ^{mg} / _l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
acetic acid	64-19-7	EC50	48 h	>300.8 ^{mg} / _l	daphnia magna	OECD Guideline 202	ECHA
acetic acid	64-19-7	ErC50	72 h	>300.8 ^{mg} / _l	algae (Scelet- onema cost- atum)	DIN EN ISO 10253	ECHA

Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Expos- ure time	Value	Species	Method	Source
2-(2-butoxyeth- oxy)ethanol	112-34-5	NOEC	96 h	≥100 ^{mg} / _l	algae (Desmod- esmus sub- spicatus)	OECD Guideline 201	ECHA
2-(2-butoxyeth- oxy)ethanol	112-34-5	growth (Eb- Cx) 10%	30 min	>1,995 ^{mg} / _l	Bacteria (activ- ated sludge)	OECD Guideline 209	ECHA
formic acid	64-18-6	NOEC	72 h	<76.8 ^{mg} / _l	algae (pseudokirch- neriella subcap- itata)	OECD Guideline 201	ECHA
formic acid	64-18-6	NOEC	21 d	≥100 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA
formic acid	64-18-6	NOEC	13 d	72 ^{mg} / _l	activated sludge, do- mestic	EU method C.3	-
formic acid	64-18-6	LOEC	72 h	76.8 ^{mg} / _l	algae (pseudokirch- neriella subcap- itata)	OECD Guideline 201	ECHA
formic acid	64-18-6	LOEC	21 d	>100 ^{mg} / _l	daphnia magna	OECD Guideline 211	ECHA
glycolic acid	79-14-1	NOEC	72 h	10 ^{mg} / _l	algae (pseudokirch- neriella subcap- itata)	OECD Guideline 201	ECHA
acetic acid	64-19-7	NOEC	72 h	>300.8 ^{mg} / _l	algae (Scelet- onema cost- atum)	DIN EN ISO 10253	ECHA

12.2 Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
2-(2-but- oxyethoxy)eth anol	112-34-5	oxygen deple- tion	85 %	28 d	OECD Guideline 301 C	ECHA
formic acid	64-18-6	oxygen deple- tion	82 %	28 d	OECD Guideline 301 D	ECHA
glycolic acid	79-14-1	carbon diox- ide generation	78 %	11 d	OECD Guideline 301 B	ECHA
acetic acid	64-19-7	biotic/abiotic	96 %	20 d	-	ECHA
acetic acid	64-19-7	oxygen deple- tion	40.2 %	1 d	-	ECHA

Biodegradation

The relevant substances of the mixture are readily biodegradable.

Persistence

No data available.

12.3 Bioaccumulative potential

Test data are not available for the complete mixture.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW
2-(2-butoxyethoxy)ethanol	112-34-5	-	1 (pH value: 7, 20 °C)
formic acid	64-18-6	-	-0.54 (25 °C)
glycolic acid	79-14-1	-	<0.3 (pH value: 4, 25 °C)
acetic acid	64-19-7	3.16	-0.17 (pH value: 7, 25 °C)

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

None of the ingredients are listed.

12.7 Other adverse effects

Data are not available.

Remarks

None.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1	UN number or ID number	
	ADR/RID/ADN	UN3265
	IMDG-Code	UN3265
	ICAO-TI	UN3265
14.2	UN proper shipping name	
	ADR/RID/ADN	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
	IMDG-Code	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
	ICAO-TI	Corrosive liquid, acidic, organic, n.o.s.
	Technical name (hazardous ingredients)	GLYCOLIC ACID, formic acid
14.3	Transport hazard class(es)	
	ADR/RID/ADN	8
	IMDG-Code	8
	ΙCAO-TI	8
14.4	Packing group	
	ADR/RID/ADN	II
	IMDG-Code	II
	ICAO-TI	II
14.5	Environmental hazards	-
14.6	Special precautions for user	-

14.7 Maritime transport in bulk according to IMO - instruments

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information

Particulars in the transport document	UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (contains: GLYCOLIC ACID, formic acid), 8, II, (E)
Classification code	C3
Danger label(s)	8
Special provisions (SP)	274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
Transport category (TC)	2
Tunnel restriction code (TRC)	E
Hazard identification No	80
Emergency Action Code	2X

International Maritime Dangerous Goods Code (IMDG) Additional information

Marine pollutant -		
Danger label(s)	8	
Special provisions (SP)	274	
Excepted quantities (EQ)	E2	
Limited quantities (LQ)	1 L	
EmS	F-A, S-B	
Stowage category	В	
Segregation group	1 - Acids.	

International Civil Aviation Organization (ICAO-IATA/DGR) Additional information

8

Danger	label(s)
Dunger	iubci(3)

Special provisions (SP)	A3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	CAS No	Restriction
ECOAT Reiniger HMT 630	this product meets the criteria for clas- sification in accordance with Regulation No 1272/2008/EC	-	R3
2-(2-butoxyethoxy)ethanol	2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5	R55
acetic acid	flammable / pyrophoric	-	R40
formic acid	flammable / pyrophoric	-	R40

Legend

R3 1. Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,

- tricks and jokes,

- games for one or more participants, or any article intended to be used as such, even with ornamental aspects,

2. Articles not complying with paragraph 1 shall not be placed on the market.

3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:

- can be used as fuel in decorative oil lamps for supply to the general public, and,

- present an aspiration hazard and are labelled with R65 or H304,

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).

5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

(a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: 'Keep lamps filled with this liquid out of the reach of children'; and, by 1 December 2010, 'Just a sip of lamp oil - or even sucking the wick of lamps - may lead to life-threatening lung damage';
(b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter may lead to life threatening lung damage';

(c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.

6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public.

7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.

Legend

- R40
 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:
 metallic glitter intended mainly for decoration,
 - artificial snow and frost,
 - 'whoopee' cushions,
 - silly string aerosols,
 - imitation excrement,
 - horns for parties,
 - decorative flakes and foams,
 - artificial cobwebs,
 - stink bombs.

2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: 'For professional users only'.

3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/324/EEC (2).

4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.

R55 1. Shall not be placed on the market for the first time after 27 June 2010, for supply to the general public, as a constituent of spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight.

2. Spray paints and spray cleaners in aerosol dispensers containing DEGBE and not conforming to paragraph 1 shall not be placed on the market for supply to the general public after 27 December 2010.

3. Without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that paints other than spray paints containing DEGBE in concentrations equal to or greater than 3 % by weight of that are placed on the market for supply to the general public are visibly, legibly and indelibly marked by 27 December 2010 as follows: 'Do not use in paint spraying equipment'.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

Not all ingredients are listed.

Seveso Directive

Not assigned.

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

None of the ingredients are listed.

Regulation 648/2004/EC on detergents

Labelling of contents (Regulation on detergents): No labelling required.

Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

Regulation concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2006/15/EC	Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
2017/164/EU	Commission Directive establishing a fourth list of indicative occupational exposure limit values pur- suant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de nav- igation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	European Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/In- land Waterways (ADR/RID/ADN)
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical sub- stances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance caus- ing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances

Abbr.	Descriptions of used abbreviations
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regula- tion (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality dur- ing a specified time interval
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit

Abbr.	Descriptions of used abbreviations
SVHC	Substance of Very High Concern
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH).

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.

Responsible for the safety data sheet

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Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.