

according to Regulation (EC) No 1907/2006

eloma Multi-Clean Klarspüler

Print date: 06.01.2015 Product code: 662165702 Page 1 of 9

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

1.1. Product identifier

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

Use of the substance/mixture

Cleaning agent, acidic.

Uses advised against

not known

1.3. Details of the supplier of the safety data sheet

Company name: Eloma GmbH

Street: Otto-Hahn-Strasse 10
Place: D-82216 Maisach
Telephone: +49 (0) 8141 3950
Responsible Department: info@eloma.com

1.4. Emergency telephone

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This mixture is not classified as hazardous according to Directive 1999/45/EC.

GHS classification

Hazard categories:

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes serious eye irritation.

2.2. Label elements

Signal word: Warning Pictograms: GHS07



Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

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

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.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
201-069-1	citric acid monohydrate	<5 %
5949-29-1	Xi - Irritant R36	
	Eye Irrit. 2; H319	
01-2119457026-42		
200-661-7	propan-2-ol; isopropyl alcohol; isopropanol	<=10 %
67-63-0	F - Highly flammable, Xi - Irritant R11-36-67	
603-117-00-0	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	
	Ethoxylated alcohols C9-C11	<5 %
68439-46-3	Xi - Irritant R38-41	
	Skin Irrit. 2, Eye Dam. 1; H315 H318	
02-2119552440-48		

Full text of R and H phrases: see Section 16.

Further Information

propan-2-ol; isopropyl alcohol; isopropanol: REACH-no.: 01-2119457558-25

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

After inhalation

Provide fresh air. In case of irritation of the respiratory tract seek medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth. Let water be swallowed in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

refer to chapter 2 and 11.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Water spray. Foam. Extinguishing powder.

Unsuitable extinguishing media

High power water jet.



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5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO2). Carbon monoxide.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical resistant suit. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray/stream to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapour or spray. Avoid contact with skin, eye and clothing. Wear personal protection equipment. (refer to chapter 8)

6.2. Environmental precautions

Do not empty into drains or the aquatic environment. Eliminate leaks immediately.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed containers for disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Wear personal protection equipment. (refer to chapter 8)

Provide adequate ventilation.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Avoid contact with skin, eye and clothing.

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances.

Further information on storage conditions

Protect against: moisture. UV-radiation/sunlight. heat. frost.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

8.2. Exposure controls



Appropriate engineering controls

Provide for sufficient ventilation and punctiform suction at critical points.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective and hygiene measures

Always close containers tightly after the removal of product. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and at the end of work. Do not eat, drink, smoke or sneeze at the workplace.

Eye/face protection

Tightly sealed safety glasses. (DIN EN 166)

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves. (DIN EN 374)

Suitable material: NBR (Nitrile rubber). (0,4 mm, Breakthrough time >=480 min)

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Breakthrough times and swelling characteristics of the material must be taken into consideration. Before using check leak tightness / impermeability. In case of reutilization, clean gloves before taking off and store in well-aired place.

Skin protection

No special measures are necessary.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection required in case of:

insufficient ventilation.

exceeding critical value

Generation/formation of aerosols

Suitable respiratory protective equipment: Combination filter device (DIN EN 141).. Type AP-2/3

The filter class must be suitable for the maximum contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

Environmental exposure controls

Do not allow uncontrolled leakage of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid Colour: blue

Odour: characteristic

Test method



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pH-Value: ~2

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

>90 °C

Flash point:

>61 °C

Explosive properties

none/none

Oxidizing properties

none/none

Vapour pressure:

Density (at 20 °C):

Water solubility:

Viscosity / dynamic:

Solvent content:

not determined
not determined
not determined

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Oxidizing agents, strong. Alkalis (alkalis).

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon dioxide (CO2). Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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



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Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
5949-29-1	citric acid monohydrate				
	oral	LD50	5400 mg/kg	Mouse.	ECHA Dossier
	dermal	LD50	>2000 mg/kg	Rat.	ECHA Dossier
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol				
	oral	LD50	>5000 mg/kg	Rat.	ECHA Dossier
	dermal	LD50	>5000 mg/kg	Rabbit.	RTECS
68439-46-3	Ethoxylated alcohols C9-C11				
	oral	LD50	3200 mg/kg	Rat.	MSDS extern.

Irritation and corrosivity

Causes serious eye irritation.

Sensitising effects

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

STOT-single exposure

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

Severe effects after repeated or prolonged exposure

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

propan-2-ol; isopropyl alcohol; isopropanol:

Chronic inhalative toxicity (Rat.): NOAEC = 5000 ppm (OECD 451), literature infomation: ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction

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

propan-2-ol; isopropyl alcohol; isopropanol::

OECD Guideline 471 (Bacterial Reverse Mutation Assay) = negative., literature infomation: ECHA Dossier OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) = negative., literature infomation: ECHA Dossier

No indications of human carcinogenicity exist., literature infomation: ECHA Dossier

citric acid monohydrate:

In-vitro mutagenicity : OECD Guideline 471 (Bacterial Reverse Mutation Assay) = negative. literature

infomation: ECHA Dossier

In-vivo mutagenicity: OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test) =

negative. literature infomation: ECHA Dossier

Aspiration hazard

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

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity



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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas	ECHA Dossier
	Acute crustacea toxicity	EC50	1400 mg/l	48 h	Daphnia magna	GESTIS
68439-46-3	Ethoxylated alcohols C9-C11					
	Acute fish toxicity	LC50	>1-10 mg/l	96 h	Leuciscus idus	MSDS extern.

12.2. Persistence and degradability

CAS No	Chemical name						
	Method	Value	d	Source			
	Evaluation						
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol						
	EU Method C.5/ EU Method C.6	53%	5	ECHA Dossier			
	Product is biodegradable.						
68439-46-3	Ethoxylated alcohols C9-C11						
	OECD 301B; ISO 9439; 92/69/EWG, C.4-C)	>60%	28	MSDS extern.			
	Product is biodegradable.						
	OECD 301E	>90 %		MSDS extern.			
	Product is biodegradable.						

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
5949-29-1	citric acid monohydrate	-1,57
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Waste disposal according to official state regulations. Consult the local waste disposal expert about waste disposal. Cleaned containers may be recycled.

Waste disposal number of waste from residues/unused products

060199 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; wastes not otherwise specified

Waste disposal number of used product

060199 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; wastes not otherwise specified

Waste disposal number of contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging



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Contaminated packaging

Handle contaminated packaging in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not restricted

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not restricted

Marine transport (IMDG)

Other applicable information (marine transport)

Not restricted

Air transport (ICAO)

Other applicable information (air transport)

Not restricted

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

irrelevant

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC): No information available.

Additional information

The preparation is not dangerous in the sense of Directive 1999/45/EC.

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

Not subject to regulation 96/82/EC.

National regulatory information

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Rev.1.00; 18.12.2014, Initial release

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European

Agreement concerning the CAS Chemical Abstracts Service DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER



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International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level NTP: National Toxicology Program

N/A: not applicable

OSHA: Concerning the International Transport of Dangerous Goods by Rail)

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern TRGS Technische Regeln für Gefahrstoffe TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

Full text of R phrases referred to under Sections 2 and 3

11	Highly flammable.
36	Irritating to eyes.
38	Irritating to skin.

41 Risk of serious damage to eyes.

Vapours may cause drowsiness and dizziness.

Full text of H statements referred to under Sections 2 and 3

H225
Highly flammable liquid and vapour.
H315
Causes skin irritation.
H318
Causes serious eye damage.
H319
Causes serious eye irritation.
H336
May cause drowsiness or dizziness.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)