



FROSCH ZERO APC EL 1000 ML E

WM 0714391

Order number: 0714391

Version 3.0

Revision Date 03.10.2020

Print Date 07.04.2021

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

1.1 Product identifier

Trade name : FROSCH ZERO APC EL 1000 ML E
Identification number : 61055

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

Use of the Substance/Mixture : Cleaning agent

1.3 Details of the supplier of the safety data sheet

Company : Erdal GmbH
Neualmerstrasse 13
5400 Hallein
Telephone : +436245801110
Telefax : +43624580111350
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person
Contact person : Product development / product safety

1.4 Emergency telephone number

112
+43(0)1-4064343

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
ethanol	64-17-5 200-578-6 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 SCL >= 50 % 2; H319	>= 2 - < 5



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D-pentose et D-glucose, oligomeric, C8-C10-alkyl glycosides	483-960-7 01-0000020220-90-0000	Eye Dam. 1; H318 SCL 10 - 42 % 2; H319 >= 42 % 1; H318	>= 1 - < 2
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For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Protect unharmed eye.
If easy to do, remove contact lens, if worn.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known



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5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Sweep up and shovel.
Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. No special handling advice required. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.

Advice on common storage : No special restrictions on storage with other products.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Cleaning agent



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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

ethanol 64-17-5:	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 1900 mg/m ³
		End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 950 mg/m ³
		End Use: Workers Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 343 mg/kg
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 950 mg/m ³
		End Use: Consumers Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 206 mg/kg
		End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 114 mg/m ³
		End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 87 mg/kg
		End Use: Consumers Exposure routes: Skin contact Potential health effects: Acute local effects Value: 950 mg/m ³

PNEC

ethanol 64-17-5:	:	Fresh water Value: 0,96 mg/l
		Marine water Value: 0,79 mg/l
		Fresh water sediment



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Value: 3,6 mg/kg

Soil
Value: 0,63 mg/kg

STP
Value: 580 mg/l

intermittent release
Value: 2,75 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : not required under normal use

Hand protection

Material : not required under normal use

For prolonged or repeated contact use protective gloves.
It is suggested the usage of chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1: 2003 (0,4 mm).
As alternative, a different type of gloves might be used if, accordingly to the recommendations of the producer, guarantee the same level of protection.

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Skin and body protection : not required under normal use

Respiratory protection : not required under normal use

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : 9,7, at20 °C

Melting point/range : No data available



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Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Flammability (liquids)	: No data available
Burning rate	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1,005 g/cm ³ at 20 °C
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions., No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products



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Hazardous decomposition products : No hazardous decomposition products are known.
Other information : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Our company is strongly against animal testing.

Our company does not place any orders for animal testing for the finished product or the ingredients.

However, as a result of EU legislation (REACH Regulation), the manufacturers of ingredients or EU importers are obliged to test ingredients with regard to their effects on human health and the environment before they are brought onto the market. Some of the tests made necessary by this took place decades ago.

Product

Skin corrosion/irritation : According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

Serious eye damage/eye irritation : According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

Respiratory or skin sensitisation : No data available

Germ cell mutagenicity : Not Rated

Carcinogenicity : Not Rated

Reproductive toxicity : Not Rated

STOT - single exposure : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity : Not Rated

Further information : No data available

Components:

ethanol

64-17-5:

Acute oral toxicity : LD50 Oral Rat: 10.470 mg/kg
Method: OECD Test Guideline 401

LD50 Rat: 5.000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 Rat: 51 mg/l
Exposure time: 4 h



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Acute dermal toxicity	: LD50 Dermal Rabbit: > 2.000 mg/kg Method: OECD Test Guideline 402
	LD50 Dermal Rabbit: > 10.000 mg/kg Method: OECD Test Guideline 402
Skin corrosion/irritation	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404
Serious eye damage/eye irritation	: Species: Rabbit Result: Mild eye irritation Method: OECD Test Guideline 405
Respiratory or skin sensitisation	: Species: Mouse Result: Does not cause skin sensitisation. Method: see user defined free text
Reproductive toxicity	: Species: Rat Application Route: Oral NOAEL: 5.200 mg/kg Species: Rat Application Route: Oral NOAEL: 13.800 mg/kg Species: Rat Application Route: Inhalation NOAEL: 30400 mg/m3
Repeated dose toxicity	: Rat, male: NOAEL: > 20 mg/kg Method: OECD Test Guideline 403 Rat, female: NOAEL: 1.730 mg/kg Method: OECD Test Guideline 408

D-pentose et D-glucose, oligomeric, C8-C10-alkyl glycosides

Acute oral toxicity	: LD50 Rat: > 5.000 mg/kg
Repeated dose toxicity	: NOAEL: 1.000 mg/kg

SECTION 12: Ecological information

12.1 Toxicity

Components:

ethanol

64-17-5:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 13 g/l Exposure time: 96 h
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	Method: OECD Test Guideline 203
	LC50 (Leuciscus idus (Golden orfe)): 8.150 mg/l Exposure time: 48 h
	LC50 (Pimephales promelas (fathead minnow)): > 0,1 g/l Exposure time: 96 h
	LC50 (Fish): 11.200 mg/l
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 12.340 mg/l Exposure time: 48 h
	EC50 : 5.012 mg/l
Toxicity to algae	: EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201
	EC50 (Scenedesmus capricornutum (fresh water algae)): 12.900 mg/l Exposure time: 48 h Test Type: Growth inhibition Method: No information available.
	EC0 (Scenedesmus quadricauda (Green algae)): 5.000 mg/l Exposure time: 168 h
	EC50 : 4.432 mg/l
	EC10 : 11,5 mg/l
	EC10 : 280 mg/l
Toxicity to bacteria	: EC50 (Pseudomonas putida): 11.800 mg/l Exposure time: 16 h Test Type: Cell multiplication inhibition test
D-pentose et D-glucose, oligomeric, C8-C10-alkyl glycosides	
:	
Toxicity to fish	: LC50 : 101 mg/l
	NOEC : 1,8 mg/l Exposure time: 28 d
Toxicity to daphnia and other aquatic invertebrates	: EC50 : 11,96 mg/l
	NOEC : 1,0 mg/l Exposure time: 21 d
Toxicity to algae	: EC50 : 21 mg/l
	NOEC : > 654 mg/l Exposure time: 21 d
Toxicity to bacteria	: EC0 : 200 mg/l
	NOEC : > 654 mg/l



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Exposure time: 14 d

12.2 Persistence and degradability

Components:

ethanol

64-17-5:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Method: OECD Test Guideline 301

D-pentose et D-glucose, oligomeric, C8-C10-alkyl glycosides

:

BOD/ThOD : > 60 %
Remarks: see user defined free text

12.3 Bioaccumulative potential

Components:

ethanol

64-17-5:

Bioaccumulation : Concentration: 3,2 mg/l

Partition coefficient: n-octanol/water : log Pow: -0,32

12.4 Mobility in soil

Components:

ethanol

64-17-5:

Distribution among environmental compartments : Koc: 1Remarks: Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number



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ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not regulated as a dangerous good

IATA

Not dangerous goods

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

TA Luft List (Germany) : Total dust: Not applicable



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	: Inorganic substances in powdered form: Not applicable
	: Inorganic substances in vapour or gaseous form: : portionClass 3: 0,21 %
	: Organic Substances: Not applicable
	: Carcinogenic substances: Not applicable
	: Mutagenic: Not applicable
	: Toxic to reproduction: Not applicable
Volatile organic compounds (VOC) content	: Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Update: Percent volatile: 5,54 % 663,22 g/l VOC content excluding water
Volatile organic compounds (VOC) content	: Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Update: Percent volatile: 5,54 % 55,69 g/l VOC content valid only for coating materials used on wood surfaces
according to Detergents Regulation EC 648/2004	: <5% Anionic surfactants, Non-ionic surfactants

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Further information

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Classification procedure:

Calculation method

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50



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% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

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