

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Reference number: 274493

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

1.1. Product identifier

Product form : Mixture

Trade name : CaluClean ruitensproeiervloeistof antivries -20 °C

UFI : AWPU-XN71-530P-UGSH

Product code : 242011
Type of product : Detergent
Product group : Cleaning product

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

1.2.1. Relevant identified uses

Main use category : Professional use Industrial/Professional use spec : Wide dispersive use

Use of the substance/mixture : The information given in this MSDS concerns the product and is given on the assumption

mentioned in section 1.1, that the product will be used in the manner and for the purposes

indicated by the manufacturer.

Use of the substance/mixture : Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners,

carpet cleaners, metal cleaners)

Function or use category : Cleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

Carel Lurvink Logistics B.V.

IJzersteden, 11

NL- 7547 TB Enschede

Nederland

T +31 (0)53-4344343 - F +31 (0)53-4337105 info@carellurvink.nl - www.carellurvink.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226
Serious eye damage/eye irritation, Category 2 H319
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye irritation.

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2.2. Label elements

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

Hazard pictograms (CLP)





GHS02

GHS07

Signal word (CLP) : Warning.
Contains : Ethanol

Hazard statements (CLP)

: H226 - Flammable liquid and vapour.

H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P280 - Wear eye protection, protective gloves.

P337+P313 - If eye irritation persists: Get medical advice/attention.

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 64-17-5 EC-No.: 200-578-6 EC Index-No.: 603-002-00-5 REACH-no: 01-2119457610-	15 – 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Isopropyl alcohol substance with national workplace exposure limit(s) (IE, GB)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119457558- 25	1 – 5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
2-Butoxyethanol substance with national workplace exposure limit(s) (IE, GB); substance with a Community workplace exposure limit	CAS-No.: 111-76-2 EC-No.: 203-905-0 EC Index-No.: 603-014-00-0 REACH-no: 01-2119475108-	1 – 5	Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H- and EUH-statements: see section 16

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SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : If skin irritation occurs: Get medical advice/attention. Rinse skin with water/shower. Take off

immediately all contaminated clothing.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : If you feel unwell, seek medical advice.

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

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Eye irritation.

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 : Dry powder. Carbon dioxide. Foam. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Prevent from entering sewers, basements and workpits, or any place where its

accumulation can be dangerous.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin

and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use self-contained

breathing apparatus and chemically protective clothing. For further information refer to

section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

Storage temperature : 10 - 30 °C

Heat and ignition sources : Keep away from any flames or sparking source.

Information on mixed storage : Store separately.

Storage area : Store in a clean, dry, fire resistant area. Ensure that there is a suitable ventilation system.

Special rules on packaging : Store in a closed container. Keep only in original container.

7.3. Specific end use(s)

Carefully comply with the instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Isopropyl alcohol (67-63-0)		
Ireland - Occupational Exposure Limits		
Local name	Isopropyl alcohol [Propan-2-ol]	
OEL TWA [2]	200 ppm	
OEL STEL [ppm]	400 ppm	
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body)	
Regulatory reference	Chemical Agents Code of Practice 2021	
Ireland - Biological limit values		
Local name	2-Propanol	
BMGV	40 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift at end of workweek - Notations: B (Background), Ns (Non-specific)	
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)	
United Kingdom - Occupational Exposure Limits		
Local name	Propan-2-ol	
WEL TWA (OEL TWA) [1]	999 mg/m³	
WEL TWA (OEL TWA) [2]	400 ppm	
WEL STEL (OEL STEL)	1250 mg/m³	
WEL STEL (OEL STEL) [ppm]	500 ppm	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

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Ethanol (64-17-5)			
Ireland - Occupational Exposure Limits			
Local name	Ethanol [Ethyl alcohol]		
OEL STEL [ppm]	1000 ppm		
Regulatory reference	Chemical Agents Code of Practice 2021		
United Kingdom - Occupational Exposure Limits			
Local name	Ethanol		
WEL TWA (OEL TWA) [1]	1920 mg/m³		
WEL TWA (OEL TWA) [2]	1000 ppm		
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE		
2-Butoxyethanol (111-76-2)			
EU - Indicative Occupational Exposure Limit (IOEL)			
Local name	2-Butoxyethanol		
IOEL TWA	98 mg/m³		
IOEL TWA [ppm]	20 ppm		
IOEL STEL	246 mg/m³		
IOEL STEL [ppm]	50 ppm		
Remark	Skin		
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC		
Ireland - Occupational Exposure Limits	Ireland - Occupational Exposure Limits		
Local name	2-Butoxyethanol (EGBE) [Ethylene glycol monobutyl ether]		
OEL TWA [1]	98 mg/m³		
OEL TWA [2]	20 ppm		
OEL STEL	246 mg/m³		
OEL STEL [ppm]	50 ppm		
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)		
Regulatory reference	Chemical Agents Code of Practice 2021		
Ireland - Biological limit values			
Local name	2-Butoxyethanol		
BMGV	200 mg/g creatinine Parameter: BAA - Medium: urine - Sampling time: End of shift		
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)		
United Kingdom - Occupational Exposure Limits			
Local name	2-Butoxyethanol		
WEL TWA (OEL TWA) [1]	123 mg/m³		
WEL TWA (OEL TWA) [2]	25 ppm		
WEL STEL (OEL STEL)	246 mg/m³		
WEL STEL (OEL STEL) [ppm]	50 ppm		

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2-Butoxyethanol (111-76-2)		
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), BMGV (Biological monitoring guidance values are listed in Table 2)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
United Kingdom - Biological limit values		
Local name	2-Butoxyethanol	
BMGV	240 mmol/mol Creatinine Parameter: butoxyacetic acid - Medium: urine - Sampling time: Post shift	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Use spark-/explosionproof appliances and lighting system. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0,4	2 (< 1.5)	EN ISO 374

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8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Carefully comply with the instructions for use. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Blue. Appearance : Clear. Odour : characteristic. Odour threshold : Not available Melting point : Not applicable Freezing point : Not available Boiling point : > 65 °C Flammability : Not applicable : Not available Lower explosion limit Upper explosion limit : Not available Flash point : 33 °C Auto-ignition temperature : Not available Decomposition temperature : Not available

pH : 7 pH solution concentration : 10 %

Viscosity, kinematic $< 21,505 \text{ mm}^2/\text{s}$ Viscosity, dynamic : < 20 mPa·s Solubility : completely soluble. Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure : Not available Vapour pressure at 50°C : Not available : 0,93 g/cm³ Density Relative density : Not available Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

LOAEL (oral, rat, 90 days)

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	: Not classified
Isopropyl alcohol (67-63-0)	
LD50 oral rat	5840 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 10000 mg/l/4h OECD403
Ethanol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 9720 - 11380
LD50 dermal	15800 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	100 mg/l/4h
2-Butoxyethanol (111-76-2)	
LD50 oral rat	1746 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301
LD50 oral	1414 mg/kg bodyweight Animal: guinea pig, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1020 - 1961
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	2200 mg/l
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	pH: 7 : Causes serious eye irritation. pH: 7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
Isopropyl alcohol (67-63-0)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Ethanol (64-17-5)	

(Repeated Dose 90-Day Oral Toxicity Study in Rodents)

3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408

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Ethanol (64-17-5)		
NOAEL (oral, rat, 90 days)	1730 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
2-Butoxyethanol (111-76-2)		
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)	
Aspiration hazard :	Not classified	
CaluClean ruitensproeiervloeistof antivries -20 °C		
Viscosity, kinematic	< 21,505 mm²/s	
Isopropyl alcohol (67-63-0)		
Viscosity, kinematic	3,177 mm²/s	
Ethanol (64-17-5)		
Viscosity, kinematic	1,5 mm²/s	
2-Butoxyethanol (111-76-2)		
Viscosity, kinematic	3,7 mm²/s	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Hazardous to the aquatic environment, short–term

(acute)

: Not classified

Hazardous to the aquatic environment, long-term

(chronic)

: Not classified

Isopropyl alcohol (67-63-0)		
LC50 - Fish [1]	9640 mg/l	
EC50 - Other aquatic organisms [1]	13299 mg/l waterflea	
EC50 - Other aquatic organisms [2]	> 1000 mg/l	
Ethanol (64-17-5)		
LC50 - Fish [1]	14200 mg/l	
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna	
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
2-Butoxyethanol (111-76-2)		
LC50 - Fish [1]	1474 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	≈ 1800 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	911 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	

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2-Butoxyethanol (111-76-2)	
EC50 72h - Algae [2]	1840 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '21 d'

12.2. Persistence and degradability

CaluClean ruitensproeiervloeistof antivries -20 °C		
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.	
Isopropyl alcohol (67-63-0)		
BOD (% of ThOD)	53 % ThOD	
Biodegradation	95 % OECD 301E	

12.3. Bioaccumulative potential

Isopropyl alcohol (67-63-0)		
Partition coefficient n-octanol/water (Log Pow) 0,05 OECD 107		
Ethanol (64-17-5)		
Partition coefficient n-octanol/water (Log Pow)	-0,35	
2-Butoxyethanol (111-76-2)		
Partition coefficient n-octanol/water (Log Pow) 0,81		

12.4. Mobility in soil

Isopropyl alcohol (67-63-0)	
Surface tension	22,7 mN/m

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)

Waste treatment methods

Product/Packaging disposal recommendations

- : Disposal must be done according to official regulations.
- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose in a safe manner in accordance with local/national regulations. Empty containers can be dumped after cleaning according to local legislation. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

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Additional information : Flammable vapours may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 20 01 29* - detergents containing dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
UN 1170	UN 1170	UN 1170	UN 1170	UN 1170
14.2. UN proper shippin	g name			
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethyl alcohol solution	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport document descr	iption			
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III	UN 1170 Ethyl alcohol solution, 3, III	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, III
14.3. Transport hazard o	class(es)			
3	3	3	3	3
3	3	3	3	3
14.4. Packing group				
III	III	III	III	III
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information	n available		1	

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Special provisions (ADR) : 144, 601
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T2
Portable tank and bulk container special provisions : TP1

(ADR)

Tank code (ADR) : LGBF
Vehicle for tank carriage : FL
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Operation (ADR) : S2
Hazard identification number (Kemler No.) : 30

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Orange plates : 30

1170

Tunnel restriction code (ADR) : D/E EAC code : •2YE

Transport by sea

Special provisions (IMDG) : 144, 223 Limited quantities (IMDG) : 5 L Excepted quantities (IMDG) : E1 Packing instructions (IMDG) : P001, LP01 IBC packing instructions (IMDG) : IBC03 : T2 Tank instructions (IMDG) Tank special provisions (IMDG) : TP1 : F-E EmS-No. (Fire) : S-D EmS-No. (Spillage) Stowage category (IMDG) : A

Properties and observations (IMDG) : Colourless, volatile liquids.Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to

19% Miscible with water.

Air transport

PCA Excepted quantities (IATA) : E1 PCA Limited quantities (IATA) Y344 PCA limited quantity max net quantity (IATA) 10L PCA packing instructions (IATA) 355 PCA max net quantity (IATA) : 60L CAO packing instructions (IATA) : 366 CAO max net quantity (IATA) : 2201 Special provisions (IATA) : A3, A58, A180

ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 144, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 144, 601
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Mixed packing provisions (RID) : MP1
Portable tank and bulk container instructions (RID) : T2
Portable tank and bulk container special provisions : TP1

(RID)

Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Detergent Regulation (648/2004)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Flammability (solid, gas)	Added	
	Concentration of the solution used for the pH measurement	Added	
	Supersedes	Modified	
	Revision date	Modified	
1.1	UFI on SDS 1.1	Added	
1.1	Trade name	Added	
1.1	Name	Modified	
1.2	Use of the substance/mixture	Added	
1.2	Main use category	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures after ingestion	Modified	

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Indication of changes			
Section	Changed item Change Comments		Comments
4.1	First-aid measures after skin contact Modified		
4.3	Other medical advice or treatment	Added	
5.1	Suitable extinguishing media	Modified	
5.2	Hazardous decomposition products in case of fire	Modified	
5.3	Protection during firefighting	Added	
6.1	Protective equipment	Modified	
6.1	Emergency procedures	Modified	
6.2	Environmental precautions	Modified	
6.3	Other information	Added	
6.3	Methods for cleaning up	Modified	
6.4	Reference to other sections (8, 13)	Modified	
7.1	Hygiene measures	Modified	
7.1	Precautions for safe handling	Modified	
8.2	Respiratory protection	Added	
8.2	Skin and body protection	Added	
9.1	Melting point	Added	
10.3	Possibility of hazardous reactions	Added	
10.6	Hazardous decomposition products	Modified	
12.1	Ecology - general	Added	
13.1	Waste treatment methods	Added	
15.2	Chemical safety assessment	Added	
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:		
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	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	

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Abbreviations and acronyms:			
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
STP	Sewage treatment plant		
TLM	Median Tolerance Limit		
SDS	Safety Data Sheet		
vPvB	Very Persistent and Very Bioaccumulative		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
EC-No.	European Community number		
EN	European Standard		
OEL	Occupational Exposure Limit		
ThOD	Theoretical oxygen demand (ThOD)		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
ED	Endocrine disrupting properties		

Data sources

Other information

- : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:		
Acute Tox. 3 (Inhalation)	halation) Acute toxicity (inhal.), Category 3	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
EUH210	Safety data sheet available on request.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	

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Full text of H- and EUH-statements:		
Flam. Liq. 2	Flammable liquids, Category 2	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H336	May cause drowsiness or dizziness.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 3	H226	On basis of test data
Eye Irrit. 2	H319	Calculation method

The classification complies with : ATP 8

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.