Ethyl Alcohol 96% v/v

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 10/28/2021 Revision date: 6/27/2023 Supersedes version of: 10/28/2021 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : Ethyl Alcohol 96% v/v
Type of product : Pharmaceutical,Solvents

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 use
Use of the substance/mixture : Food/feedstuff additives
Pharmaceuticals

Title	Life cycle stage	Use descriptors
Ethyl Alcohol 96% v/v	Industrial, Professional	PC0, PC29, PROC0

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Nedstar BV
Herengracht 442
1017 BZ Amsterdam - The Netherlands
T +31625463873
logistics@nedstar.com - www.nedstar.com

1.4. Emergency telephone number

Country	Official advisory body	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	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 2 H225
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

No additional information available.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS02 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly 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.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Component	
ethanol; ethyl alcohol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Product name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanol; ethyl alcohol substance with national workplace exposure limit(s) (GB)	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (REACH-no) 01-2119457610-43	95-100	Flam. Liq. 2, H225 Eye Irrit. 2, H319

Specific concentration limits:		
ethanol; ethyl alcohol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (REACH-no) 01-2119457610-43	(50 ≤ C < 100) Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after skin contact : Take off immediately all contaminated clothing. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after eye contact : Causes serious eye irritation.

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

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Precautionary measures fire : Eliminate all ignition sources if safe to do so.

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Stop leak if safe to do so. Use special care to avoid static electric charges. No open flames. No smoking. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Do not breathe vapours. Avoid contact with skin and eyes. Ventilate area. No flames, no sparks. Eliminate all sources of ignition.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Use explosion-proof equipment.

Emergency procedures	:	Ventilate area. All equipment used when handling the product must be grounded. Cover spill with non combustible material, e.g.: sand/earth. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials.

6.4. Reference to other sections

See Section 8 for information on personal protection equipment. Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools.
Hygiene measures	:	When using do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep in fireproof place. Keep container tightly closed.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ethanol; ethyl alcohol (64-17-5)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethanol
WEL TWA (OEL TWA) [1]	1920 mg/m³
WEL TWA (OEL TWA) [2]	1000 ppm
WEL STEL (OEL STEL)	5760 mg/m³ (calculated)
WEL STEL (OEL STEL) [ppm]	3000 ppm (calculated)
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

ethanol; ethyl alcohol (64-17-5)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	1900 mg/m³
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	950 mg/m³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	950 mg/m³
Long-term - systemic effects,oral	87 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	114 mg/m³
Long-term - systemic effects, dermal	206 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.96 mg/l
PNEC aqua (marine water)	0.79 mg/l
PNEC aqua (intermittent, freshwater)	2.75 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3.6 mg/kg dwt
PNEC sediment (marine water)	2.9 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.63 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	0.72 g/kg food
PNEC (STP)	
PNEC sewage treatment plant	580 mg/l

8.1.5. Control banding

No additional information available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure there is adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Wear safety glasses with side shields (EN 166)

8.2.2.2. Skin protection

Skin and body protection:
Recommendation: Protective clothing. EN 13034

Hand protection:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (>=0.4 mm), butyl rubber (>=0.7 mm) and others. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:
Provide adequate ventilation. In case of inadequate ventilation wear respiratory protection. CE-approved respirator for organic vapors and solvents (type AX, brown).

8.2.2.4. Thermal hazards
No additional information available.

8.2.3. Environmental exposure controls

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	transparent.
Odour	:	Alcohol.
Odour threshold	:	Not available
Melting point	:	-114 °C
Freezing point	:	Not available
Boiling point	:	78 °C
Flammability	:	Highly flammable liquid and vapour.
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	13 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	6.5 @20 °C
Viscosity, kinematic	:	1082 (≤ 2247) mm²/s
Viscosity, dynamic	:	1.17 mPa·s
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	57 hPa
Vapour pressure at 50°C	:	Not available
Density	:	0.789 g/cm³ @20 °C

Relative density	:	0.805
Relative vapour density at 20°C	:	Not available
Particle size	:	Not applicable
Particle size distribution	:	Not applicable
Particle shape	:	Not applicable
Particle aspect ratio	:	Not applicable
Particle aggregation state	:	Not applicable
Particle agglomeration state	:	Not applicable
Particle specific surface area	:	Not applicable
Particle dustiness	:	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

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. May release flammable gases.

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

ethanol; ethyl alcohol (64-17-5)	
LD50 oral rat	10470 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 9720 - 11380
LD50 oral	8300 mg/kg bodyweight Animal: mouse
LD50 dermal rabbit	> 2000 mg/kg (Symptoms: Redness, pain)
LD50 dermal	15800 mg/kg bodyweight

LC50 Inhalation - Rat	124.7 mg/l/4h (Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness)
LC50 Inhalation - Rat (Dust/Mist)	> 99999 mg/l
ATE oral	15010 mg/kg bodyweight
ATE vapours	124.7 mg/l/4h
ATE dust/mist	124.7 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 6.5 @20 °C

Serious eye damage/irritation : Causes serious eye irritation.
pH: 6.5 @20 °C

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

ethanol; ethyl alcohol (64-17-5)	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

ethanol; ethyl alcohol (64-17-5)	
LOAEL (oral, rat, 90 days)	3200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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), Remarks on results: other:
NOAEL (subchronic, oral, animal/male, 90 days)	< 9700 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)
NOAEL (subchronic, oral, animal/female, 90 days)	> 9400 mg/kg bodyweight Animal: mouse, Animal sex: female, Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

Ethyl Alcohol 96% v/v	
Viscosity, kinematic	1082 (≤ 2247) mm²/s

11.2. Information on other hazards

No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

ethanol; ethyl alcohol (64-17-5)	
LC50 - Fish [1]	14.2 g/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	13000 mg/l (Oncorhynchus mykiss (Rainbow trout))
EC50 - Crustacea [1]	> 10000 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	5012 mg/l waterflea
EC50 - Other aquatic organisms [2]	275 mg/l
EC50 72h - Algae [1]	275 mg/l Chlorella vulgaris
EC50 96h - Algae [1]	≈ 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	9.6 mg/l Test organisms (species): Daphnia magna Duration: '9 d'

12.2. Persistence and degradability

ethanol; ethyl alcohol (64-17-5)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

ethanol; ethyl alcohol (64-17-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.32
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Component	
ethanol; ethyl alcohol (64-17-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available.

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Avoid release to the environment.

HP Code	:	HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

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

14.1. UN number or ID number

UN-No. (ADR)	:	UN 1170
UN-No. (IMDG)	:	UN 1170
UN-No. (IATA)	:	UN 1170
UN-No. (ADN)	:	UN 1170
UN-No. (RID)	:	UN 1170

14.2. UN proper shipping name

Proper Shipping Name (ADR)	:	ETHANOL (ETHYL ALCOHOL) / ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IMDG)	:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA)	:	Ethanol solution
Proper Shipping Name (ADN)	:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (RID)	:	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport document description (ADR)	:	UN 1170 ETHANOL (ETHYL ALCOHOL) / ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)
Transport document description (IMDG)	:	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
Transport document description (IATA)	:	UN 1170 Ethanol solution, 3, II
Transport document description (ADN)	:	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
Transport document description (RID)	:	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	:	3
Danger labels (ADR)	:	3

:

IMDG

Transport hazard class(es) (IMDG)	:	3

Danger labels (IMDG) : 3

:

IATA

Transport hazard class(es) (IATA) : 3

Danger labels (IATA) : 3

:

ADN

Transport hazard class(es) (ADN) : 3

Danger labels (ADN) : 3

:

RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3

:

14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available.

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1

Special provisions (ADR) : 144, 601

Limited quantities (ADR) : 1l

Excepted quantities (ADR) : E2

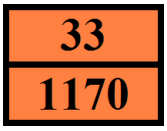
Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : LGBF

Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•2YE

Transport by sea

Special provisions (IMDG)	:	144
Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
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)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
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)	:	1 L
Excepted quantities (ADN)	:	E2
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

Rail transport

Classification code (RID)	:	F1
Special provisions (RID)	:	144, 601
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP1
Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Listed on REACH Annex XVII (Restriction Conditions). The following restrictions are applicable:		
Reference code	Applicable on	Entry title or description
3(a)	Ethyl Alcohol 96% v/v ; ethanol; ethyl alcohol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	Ethyl Alcohol 96% v/v ; ethanol; ethyl alcohol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Contains no substance(s) listed on the REACH Candidate List
Organic solvent
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out
ethanol; ethyl alcohol

SECTION 16: Other information

Indication of changes:			
Update.			
Section	**Changed item**	**Change**	**Comments**
	Other information	Added	
	Flammability (solid, gas)	Added	
	Indication of changes	Added	
	CSR applicable	Added	
	Proper Shipping Name (RID)	Removed	
	Proper Shipping Name (IMDG)	Removed	

	Proper Shipping Name (IATA)	Removed	
	Revision date	Modified	
	SDS EU format	Added	
2.2	Precautionary statements (CLP)	Added	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after inhalation	Modified	
4.2	Symptoms/effects after eye contact	Added	
5.1	Unsuitable extinguishing media	Modified	
5.1	Suitable extinguishing media	Modified	
5.2	Explosion hazard	Added	
5.2	Fire hazard	Modified	
5.3	Protection during firefighting	Modified	
5.3	Firefighting instructions	Modified	
6.1	Emergency procedures	Modified	
6.1	Protective equipment	Modified	
6.1	Emergency procedures	Modified	
6.1	General measures	Modified	
6.2	Environmental precautions	Modified	
6.3	Methods for cleaning up	Modified	
6.4	Reference to other sections (8, 13)	Modified	
7.1	Hygiene measures	Added	
7.1	Precautions for safe handling	Modified	
7.1	Additional hazards when processed	Modified	
7.2	Incompatible materials	Added	
7.2	Incompatible products	Added	
7.2	Storage conditions	Added	
7.2	Technical measures	Added	
8.2	Respiratory protection	Added	
8.2	Other information	Added	

8.2	Skin and body protection	Modified	
8.2	Eye protection	Modified	
8.2	Hand protection	Modified	
8.2	Appropriate engineering controls	Modified	
9.1	Viscosity, kinematic	Added	
9.1	Vapour pressure	Added	
9.1	Melting point	Added	
9.1	Viscosity, dynamic	Modified	
9.1	Density	Modified	
9.1	Relative density	Modified	
9.1	Boiling point	Modified	
9.1	Flash point	Modified	
9.1	Colour	Modified	
9.1	Odour	Modified	
10.2	Chemical stability	Modified	
10.3	Possibility of hazardous reactions	Modified	
10.4	Conditions to avoid	Modified	
10.5	Incompatible materials	Modified	
10.6	Hazardous decomposition products	Modified	
13.1	Ecology - waste materials	Added	
13.1	Additional information	Added	
13.1	Product/Packaging disposal recommendations	Modified	
14.2	Proper Shipping Name (ADN)	Removed	
15.1	REACH Annex XVII	Added	
15.2	Chemical safety assessment	Modified	
16	Other information	Modified	
16	Abbreviations and acronyms	Modified	

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
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
BLV	Biological limit value

BOD	Biochemical oxygen demand (BOD)
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
ED	Endocrine disrupting properties
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
N.O.S.	Not Otherwise Specified
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
OEL	Occupational Exposure Limit
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class
VOC	Volatile Organic Compounds
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
TLM	Median Tolerance Limit
STP	Sewage treatment plant
SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic

Other information : 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:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Full text of use descriptors	
PC0	Other
PC29	Pharmaceuticals
PROC0	Other

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Flam. Liq. 2	H225	On basis of test data
Eye Irrit. 2	H319	Calculation method

The classification complies with : ATP 12

SDS EU (REACH Annex II) - Nedstar

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.