

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ETHANOL, absolute

Revision date: 04.02.2020

Product code: 11284-0008

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

1.1. Product identifier

ETHANOL, absolute

REACH Registration Number: 01-2119457610-43-XXXX
CAS No: 64-17-5
Index No: 603-002-00-5
EC No: 200-578-6

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

Use of the substance/mixture

For industrial use and usage in the fuel sector

1.3. Details of the supplier of the safety data sheet

Company name: All Seasons IBS S.A.
Street: Żeromskiego 53
Place: 90-625 Łódź/Poland
Telephone: +48 513 100 077 Telephone: +48 42 288 80 70
Contact person: Adam F. Stross
Responsible Department: Responsible for the safety data sheet: ibs@allseasons-ibs.pl

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Flammable liquid: Flam. Liq. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Hazard Statements:
Highly flammable liquid and vapour.
Causes serious eye irritation.

2.2. Label elements

Regulation (EC) No. 1272/2008

Signal word: Danger

Pictograms:



Hazard statements

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

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P337+P313 If eye irritation persists: Get medical advice/attention.
P240 Ground and bond container and receiving equipment.

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P243 Take action to prevent static discharges.

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH), this product is regarded to be neither PBT nor vPvB.
In use, may form flammable/explosive vapour-air mixture.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: C₂ H₅ OH

Molecular weight: 46,07

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64-17-5	Ethanol			99,9 %
	200-578-6	603-002-00-5	01-2119457610-43-0000	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If eye irritation persists, consult a specialist.

After ingestion

If swallowed by mistake drink plenty of water and seek medical treatment.
Never give anything by mouth to an unconscious person.

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

Causes serious eye irritation.
Inhalation of vapours in high concentration can cause narcotic effects.
Inhalation of vapours in high concentration may cause irritation of respiratory system.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

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Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire may produce:
carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.
Protective suit.

Additional information

Vapours are heavier than air and spread along ground.
The vapour/air mixture is explosive, even in empty, uncleaned receptacles.
Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.
Ensure adequate ventilation.
Use personal protective clothing.
Keep away sources of ignition.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation.
When using do not eat, drink or smoke.
Do not breathe vapours.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Do not smoke - volatile.
Keep product and empty container away from heat and sources of ignition.
Take precautionary measures against static discharges.
Use explosion-proof equipment / fittings and non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.
Pay attention to anti-explosion rules.

Hints on joint storage

Incompatible with:
Oxidizing agents
Alkaline metals and earth alkaline metals.

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Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

For industrial use and usage in the fuel sector

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

Hand protection

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance approx. 480 minutes, i.e. protective glove <Butoject 898> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (DIN EN ISO 6530)

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Alcoholic

Test method

pH-Value (at 20 °C):	7,0 (10 g/l)
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Changes in the physical state

Melting point:	- 114 °C
Initial boiling point and boiling range:	78 °C
Sublimation point:	n.a.
Softening point:	n.d.

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Flash point: 13 °C

Flammability

Solid: n.a.

Gas: n.a.

Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits: 3,5 vol. %

Upper explosion limits: 15 vol. %

Ignition temperature: 363 °C

Auto-ignition temperature

Solid: n.a.

Gas: n.a.

Decomposition temperature: n.d.

Oxidizing properties

Not oxidising.

Vapour pressure: 57,26 hPa
(at 20 °C)

Density (at 20 °C): 0,784 g/cm³

Bulk density: n.a.

Water solubility: 789,6 g/L

Solubility in other solvents

n.d.

Partition coefficient: (n-octanol/water) - 0,35

Viscosity / dynamic: 1,2 mPa·s
(at 20 °C)

Viscosity / kinematic: n.d.

Flow time: n.d.

Vapour density: 1,6

Evaporation rate: n.d.

Solvent separation test: 0 %

Solvent content: 100 %

9.2. Other information

Surface tension: 40 mN/m

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts with:

oxidizing agents

Alkaline metals and alkaline earth metals.

10.4. Conditions to avoid

Vapour/air mixtures are explosive at intensive warming.

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Heating can release vapours which can be ignited.

10.5. Incompatible materials

oxidizing agents
Alkaline metals and alkaline earth metals.

10.6. Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.
LD50/oral/rat: 10470 mg/kg (CSR)
LD50/dermal/rabbit: 15000 mg/kg (CSR)
LC50/inhalation/rat: 3000 mg/m³/4 h (CSR)

Irritation and corrosivity

Causes serious eye irritation.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Skin irritation (rabbit): Non-irritant (CSR)
Eyes irritation (rabbit): Irritant (CSR)

Sensitising effects

Based on available data, the classification criteria are not met.
Magnusson-Kligmann Test: Non-sensitizing (CSR)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.
Mutagenicity: No experimental information on genotoxicity in vitro available. (Salmonella typhimurium)

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

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

Practical experience

Other observations

Inhalation of vapours in high concentration can cause narcotic effects.
Inhalation of vapours in high concentration may cause irritation of respiratory system.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

SECTION 12: Ecological information

12.1. Toxicity

LC50/Oncorhynchus mykiss/96 h = 1120 mg/l (CSR)
EC50/Ceriodaphnia dubia/48 h = 5012 mg/l (CSR)
EC50/Chlorella vulgaris/72 h = 275 mg/l (CSR)

12.2. Persistence and degradability

Biodegradable (OECD): Readily biodegradable. (CSR)

12.3. Bioaccumulative potential

Product has a low bioaccumulating potential. Log Pow: - 0,35

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12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH), this product is regarded to be neither PBT nor vPvB.

12.6. Other adverse effects

Low hazard to waters.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal.

List of Wastes Code - residues/unused products

070104 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 1170
<u>14.2. UN proper shipping name:</u>	ETHANOL (ETHYL ALCOHOL)
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	II
Hazard label:	3



Classification code:	F1
Limited quantity:	1 L / 30 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	UN 1170
<u>14.2. UN proper shipping name:</u>	ETHANOL (ETHYL ALCOHOL)
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	II
Hazard label:	3

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Classification code: F1
Limited quantity: 1 L / 30 kg
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 1170
14.2. UN proper shipping name: ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Marine pollutant: No
Limited quantity: 1 L / 30 kg
Excepted quantity: E2
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1170
14.2. UN proper shipping name: ETHANOL (ETHYL ALCOHOL)
14.3. Transport hazard class(es): 3
14.4. Packing group: II
Hazard label: 3



Limited quantity Passenger: 1 L
Passenger LQ: Y341
Excepted quantity: E2
IATA-packing instructions - Passenger: 353
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 364
IATA-max. quantity - Cargo: 60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Take the usual precautions when handling with chemicals.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 100 %

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Information according to 2012/18/EU
(SEVESO III):

P5c FLAMMABLE LIQUIDS

Additional information

The mixture contains no substances listed in Regulation (EC) no 1907/2006 Annex XVII.
The product does not contain SVHC substances in accordance with Article 57 of the REACH Regulation.

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic
vPvB = Very Persistent and very Bio-accumulative
LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

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

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)