



Safety data sheet

according to 1907/2006/EG, Article 31

1. Identification of the substance/ mixture and of the company/undertaking

1.1 Product identifier

| | |
|--------------|------------------------|
| Trade name | Ethanol Absolute 99,9% |
| | Ethanol |
| CAS number | 64-17-5 |
| EC number | 200-578-6 |
| Index number | 603-002-00-5 |

1.2 Relevant identified uses of the substance or mixture

| | |
|-----------------|--|
| Identified uses | Raw material for medical preparation, cosmeical products, printing inc, antifreeze compound, combustibile and cling material, spiritproducer and fumigation of foods |
|-----------------|--|

1.3 Details of the supplier of the safety data sheet

| | |
|-----------------------|---|
| Manufacturer/Supplier | AustrAlco Österreichische Agrar-Alkohol Handelsges.m.b.H. Bahnstrasse 16 A-2104 Spillern tel: +43 2266 81107 fax: +43 2266 80945 mail to: sdb@australco.at web: www.australco.at |
|-----------------------|---|

1.4 Emergency telephone number

| | |
|---------------------------------|------------------|
| laboratory & QM | +43 699 11855901 |
| Commissioner of dangerous goods | +43 664 4602222 |
| VIZ | +43 1 406 43 43 |

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:



GHS02 flame

Flam. Liq. 2

H225

Highly flammable liquid and vapour.

2.2 Lable elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02

Signal word

Danger

Hazard statements

H225

Highly flammable liquid and vapour.

Precautionary statements

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241

Use explosion-proof electrical/ventilating/lighting/equipment.

P280

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

P240

Ground/bond container and receiving equipment.

P233

Keep container tightly closed.

P242

Use only non-sparking tools.

P243

Take precautionary measures against static discharge.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition/information on ingredients

3.1 Substance

| | |
|--------------|-----------------------------------|
| Trade name | Ethanol Absolute 99,9% Ethanol |
| CAS number | 64-17-5 |
| EC number | 200-578-6 |
| Index number | 603-002-00-5 |

4. First aid measures

4.1 Description of first aid measures

| | |
|---------------------|--|
| After inhalation: | Supply fresh air; consult doctors in case of symptoms. |
| After skin contact: | Instantly rinse with water. |
| After eye contact: | Rinse opened eye for several minutes under running water. Then consult doctor. |
| After swallowing: | In case of persistent symptoms consult doctor. |

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

5.1 Extinguishing media

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters



Put on breathing apparatus

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Wear protective clothing.

6.2 Environmental precautions

Do not allow to enter the ground/soil.
Prevent material from reaching sewage system, holes and cellars.
Dilute with much water.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7. Handling

7.1 Precautions for safe handling

Keep containers tightly sealed.



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool location.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls/personal protection

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

| substance | CAS No. | WEL-LTV |
|-----------|---------|---|
| ethanol | 64-17-5 | 1920 mg/m ³ , 1000ppm ³ |

Additional information:

The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

General protective and hygienic measures

Wash hands during breaks and at the end of the work.

Breathing equipment

Not necessary if room is well-ventilated.

Protection of hands



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Safety glasses.

Tightly sealed safety glasses.

Body protection

Protective working clothes.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:

| | | |
|------------------------------------|--------|-----------------|
| Form: | | Fluid |
| Colour: | | Colourless |
| Smell: | | Alcohol-like |
| Geruchsschwelle: | | Not determined. |
| pH-value (10g/l H ₂ O): | (20°C) | 7,0 |
| Viscosity dynamic: | (20°C) | 1,2mPa*s |
| Melting point: | | -114°C |
| Initial boiling point: | | 78°C |
| Ignition temperature: | | 425°C |
| Decognition temperature: | | Not determined. |

| | |
|---|---|
| Self-inflammability: | Not determined. |
| Flash point: | 13°C |
| Inflammability (solid, gaseous): | Not determined. |
| Danger of explosion: | Product is not explosive. However, formation of explosive air/steam mixtures is possible. |
| Critical values for explosion: | Lower 3,4%vol Upper 15%vol |
| Steam pressure: (20°C) | 57hPa |
| Density: (20°C) | ca.0,789 g/cm ³ |
| Vapor density: | Not determined. |
| Evaporation rate: | Not determined. |
| Solubility in / Miscibility with water: | Fully miscible. |

9.2 Other information

No further relevant information available.

10. Stability and reactivity

10.1 Reactivity

Explosible with air in a vaporous / gaseous state.

10.2 Chemical stability

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions

Risk of explosion with:/ Risk of ignition or formation of inflammable gases or vapors with: alkali metals, alkaline earth metals, alkali oxides, strong oxidizing agents, halogen-halogen compounds, CrO₃, chromly chloride, ethylene oxide, fluorine, perchlorates, potassium permanganate/ sulfuric acid, perchloric acid, permanganic acid, phosphorous oxides, nitric acid, nitrogen dioxide uranium hexafluoride, hydrogen peroxide.

10.4 Conditions to avoid

Warming

10.5 Incompatible materials

Various plastics, rubber.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| | | |
|---|------|-----------------|
| LD/LC50 values that are relevant for classification | | |
| 64-17-5 Ethanol | | |
| Oral | LD50 | 7060mg/kg (rat) |

Primary irritation effect:

| | |
|----------------|------------------------------|
| On the skin: | No irritation effect. |
| On the eye: | No irritation effect. |
| Sensitization: | No sensitizing effect known. |

12. Ecological information

12.1 Toxicity

| | |
|------------------|--|
| Fish toxicity | LC50 Leuciscus idus: >100mg/l; 24h; OECD 201 |
| Daphnia toxicity | EC50 Daphnia magna: >100mg/l; 24h; OECD 201 |
| Algae toxicity | EC50 Chlorella pyrenoidosa: >100mg/l; OECD 201 |

12.2 Persistence and degradability

| | | |
|--------------------|---------------|---------------------------------|
| BSB ₅ : | 0,93-1,67 g/g | (Waterfree substances) |
| CSB: | 1,99 g/g | (Waterfree substances) (IUCLID) |
| ThSB: | 2.10 g/g | (Waterfree substances) (Lit.) |

BSB 74% of ThSB /5d (Waterfree substances) (IUCLID)

CSB 90% of ThSB (Waterfree substances) (IUCLID)

No ecological problems are to be expected when the product is handled and used with due care and attention.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:

Water hazard class 1 (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

12.5 Results of PBT- and vPvB-assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation:



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Waste key number of Austria: 55351 (ÖNORM S 2100)
Ethanol

| European waste catalogue | |
|--------------------------|-----------------------------|
| 14 06 03* | Other solvents and mixtures |

Uncleande packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14. Transport information

14.1 UN-Number

ADR, IMDG, IATA 1170

14.2 UN proper shipping name

ADR 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
IMDG ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
IATA ETHANOL SOLUTION

14.3 Transport hazard class(es)

ADR:



Class 3 (F1) flammable liquids

Lable 3

IMDG, IATA:



Class 3 Flammable liquids

Lable 3

14.4 Packaging group

ADR, IMDG, IATA II

14.5 Environmental hazards:

Marine pollutant No

14.6 Special precautions for user

Warning Flammable liquids

Kemler Number 33

EMS-Number F-E,S-D

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

Not applicable.

Transport/Additional information:

ADR

Limited quantities(LQ) 1L

Transport category 2

Tunnel restriction code D/E

UN "Model Regulation": UN1170, ETHANOL, SOLUTION (ETHYL ALCOHOL,SOLUTION),3, II

15. Regulatory information

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

National regulations

Water hazard class: 1: slightly hazardous for water

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant Statements:

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Department issuing data specification sheet:

Department quality assurance

Contact person:

ADR:

Mr. Anton Jarmer, Tel.: +43 2266 81107 13

Chief operating officer:

Mr. Johannes Heil, Tel.: +43 2266 81107 12

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent