



## 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	Korn
	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 spirit producer and fumigation of foods
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#### 1.3 Details of the supplier of the safety data sheet

<b>Manufacturer/Supplier</b>	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
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#### 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 Label 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	Korn
	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

CO<sub>2</sub>, 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 <sup>3</sup> , 1000ppm <sup>3</sup>

#### 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 <sub>2</sub> 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)	>0,811 g/cm <sup>3</sup>
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, CrO<sub>3</sub>, chromyl 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 <sub>5</sub> :	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*