

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

1.1 Product identifier

Trade name: Korn

Article number: SDB-027

CAS Number:

64-17-5

EC number:

200-578-6

Index number:

603-002-00-5

Registration number 01-2119457610-43-XXXX

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

Application of the substance / the mixture Raw material for the production of spirits and food disinfection

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

AustrAlco

Österreichische Agrar-Alkohol HandelsgesmbH

Bahnstrasse 16

A-2104 Spillern

T: +43 2266 81107 0

Further information obtainable from:

Johannes Heil

Email: heil@australco.at

1.4 Emergency telephone number:

+43 2266 8110716

Available during office hours:

Mo – Th: 07:30 - 12:00 h and 12:30 - 16:30 h

Fr: 07:30 - 12:00 h and 12:30 - 15:00 h

Call the national emergency number!

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

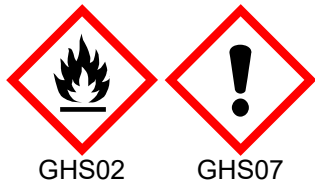
The substance is classified and labelled according to the CLP regulation.

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Hazard pictograms



Signal word Danger

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 eye protection / face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

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/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

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

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

SECTION 3: Composition/information on ingredients

3.1 Substances

CAS No. Description

64-17-5 ethanol

Identification number(s)

EC number: 200-578-6

Index number: 603-002-00-5

Dangerous components: [% (w/w)]

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of discomfort or doubt, seek medical advice.

If unconscious, use a stable lateral position and do not administer anything through mouth.

Immediately remove any clothing soiled by the product.

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After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

Seek medical treatment in case of complaints.

After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Seek medical treatment.

After swallowing:

Rinse out mouth and then drink plenty of water.

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Vapours are heavier than air and spread over the ground.

Vapours can travel to a source of ignition and flash back

Fumes can combine with air to form an explosive mixture.

In case of fire, the following can be released:

CO_x

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

Keep away from ignition sources.

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6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Risk of explosion.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding, inert material (sand, diatomite, acid binders, universal binders).

Dispose contaminated material as waste according to item 13.

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 disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Keep receptacles tightly sealed.

Avoid contact with skin and eyes.

Avoid breathing mist/vapours/spray.

Use personal protective equipment as required.

Observe protective measures and safety instructions.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Ground and bond container and receiving equipment.

Fumes can combine with air to form an explosive mixture.

Danger of explosion if fluid enters the sewage system.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Ensure adequate ventilation.

Store in accordance with local/regional/national/international regulations.

Packaging materials: tanks/containers made of stainless steel, titanium, iron, carbon steel, polypropylene, ceramics, glass, nylon

To be avoided: Natural rubber, PVC, methylmethacrylate plastics, polyamides, zinc, brass, aluminium in certain conditions

Information about storage in one common storage facility:

Store away from oxidising agents.

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Store away from incompatible materials.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Recommended storage temperature: 15 - 25 °C

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Storage class: 3

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 ethanol

MAK (Austria)	Short-term value: 3800 mg/m ³ , 2000 ppm Long-term value: 1900 mg/m ³ , 1000 ppm
AGW (Germany)	Long-term value: 380 mg/m ³ , 200 ppm 4(II);DFG, Y
LEP (Spain)	Short-term value: 1910 mg/m ³ , 1000 ppm s
VLEP (France)	Short-term value: 9500 mg/m ³ , 5000 ppm Long-term value: 1900 mg/m ³ , 1000 ppm
WEL (Great Britain)	Long-term value: 1920 mg/m ³ , 1000 ppm
TWA (Italy)	Short-term value: 1884 mg/m ³ , 1000 ppm A3
WGW (Netherland)	Short-term value: 1900 mg/m ³ , 990 ppm Long-term value: 260 mg/m ³ , 35 ppm

DNELs

CAS: 64-17-5 ethanol

Oral	Long-term exposure - systemic effects	87 mg/kg bw/d (consumer)
Dermal	Long-term exposure - systemic effects	206 mg/kg bw/d (consumer) 343 mg/kg bw/d (workers)
Inhalative	Long-term exposure - systemic effects	114 mg/m ³ (consumer) 950 mg/m ³ (workers)

PNECs

CAS: 64-17-5 ethanol

fresh water	960 µg/l
sea water	790 µg/l
intermittent release (fresh water)	2.75 mg/l
STP	580 mg/l
sediment (fresh water)	3.6 mg/kg dw
sediment (sea water)	2.9 mg/kg dw

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soil	0.63 mg/kg dw
oral	0.38 mg/kg food

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing

Ensure good ventilation/exhaustion at the workplace.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Respiratory protection:

If vapours/aerosols and/or inadequate ventilation are present, respiratory protection must be worn.

Filter type A

Protection of hands:



Protective gloves

EN 374

Material of gloves

Butyl rubber gloves; recommended material thickness: 0.7 mm, penetration time: >480 min

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.

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

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:



Tightly sealed goggles

EN 166

Body protection: Protective work clothing

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Limitation and supervision of exposure into the environment

Do not allow to enter sewers/ surface or ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Alcohol-like
Odour threshold:	No information available.
pH-value:	Not determined.

Change in condition

Melting point/freezing point:	No information available.
Initial boiling point and boiling range:	≥78 °C

Flash point: ≥12 °C

Flammability (solid, gas): Not applicable.

Decomposition temperature: No information available.

Auto-ignition temperature: No information available.

Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:

Lower:	3.5 Vol %
Upper:	15 Vol %

Oxidising properties None.

Vapour pressure at 20 °C: 57 hPa

Density at 20 °C: 0.79 - 0.81 g/cm³

Vapour density No information available.

Evaporation rate No information available.

Solubility in / Miscibility with water: Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

Dynamic:	No information available.
Kinematic:	No information available.

9.2 Other information No further relevant information available.

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SECTION 10: Stability and reactivity

10.1 Reactivity Fumes can combine with air to form an explosive mixture.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Violent reactions with:

Alkali metals, alkaline earth metal, acetic anhydride, peroxides, phosphorus oxides, strong oxidants, nitric acid, nitrate, perchlorates, => explosion hazard

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials:

Strong oxidising agents (strong mineral acids, nitric acid, peroxides, perchlorates, etc.), alkali metals, alkaline earth metals.

10.6 Hazardous decomposition products:

No decomposition if used and stored according to specifications.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

LD/LC50 values relevant for classification:

CAS: 64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat)
Inhalative	LC50/4 h	124.7 mg/l (rat)

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

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

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

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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 64-17-5 ethanol

EC50 (48 h)	12,340 mg/l (daphnia) (Daphnia magna)
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LC50 (96 h)	12,900 – 15,300 mg/l (fish) (Onchorhynchus mykiss)
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12.2 Persistence and degradability Easily biodegradable

12.3 Bioaccumulative potential

Due to the distribution coefficient n-octanol/water a worth-mentioning accumulation in organisms is not expected.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

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

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

12.5 Results of PBT and vPvB assessment

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

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

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

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

Only dispose of product residues via authorised companies according to local legislation.

European waste catalogue

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

14 06 03*	other solvents and solvent mixtures
16 03 05*	organic wastes containing hazardous substances
20 01 13*	solvents

Uncleaned packaging:

Recommendation:

Dispose of packaging according to regulations on the disposal of packagings.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN-Number

ADR/RID/ADN, IMDG, IATA

UN1170

14.2 UN proper shipping name

ADR/RID/ADN

1170 ETHANOL (ETHYL ALCOHOL)

IMDG

ETHANOL (ETHYL ALCOHOL)

IATA

ETHANOL

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14.3 Transport hazard class(es)

ADR/RID/ADN, IMDG, IATA



Class 3 Flammable liquids.

Label 3

14.4 Packing group

ADR/RID/ADN, IMDG, IATA II

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler code): 33

EMS Number: F-E,S-D

Stowage Category A

14.7 Transport in bulk according to Annex II of
Marpol and the IBC Code Not applicable.

Transport/Additional information:

ADR/RID/ADN

Limited quantities (LQ) 1L

Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

Transport category 2

Tunnel restriction code D/E

IMDG

Limited quantities (LQ) 1L

Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

Seveso category P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.

National regulations:

Information about limitation of use: Employment restrictions concerning juveniles must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Training hints

Regular training of staff involved in the transport of dangerous goods (in accordance with Chapter 1.3 ADR).

Before handling, storage or use for the first time, employees must be informed about the properties of the substance and about measures taken to ensure safety and environmental protection.

Department issuing SDS:

UmEnA GmbH

<http://umena.at>

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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2