



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

- **1.1 Product identifier**
 - Trade name:
060122 BioPremium 96%, 0,8g Bitrex, 78g TB
060457 ETHANOL 96% PH.E., 0,8g Bitrex, 78g TB
060464 ETHANOL 96% 1g Bitrex, 100g TB
060556 ETHANOL 100% PH.E., 0,8g Bitrex, 78g TB
060558 ETHANOL 100% PH.E., 1g Bitrex, 78g TB
060559 ETHANOL 100% PH.E., 0,8g Bitrex, 100g TB
063457 ETHANOL 96% PH.E., 0,8g Bitrex, 78g TB, Synthese
063556 ETHANOL 100% PH.E., 0,8g Bitrex, 78g TB, Synthese
ETHANOL Bitrex TB
 - UFI: 3HED-N5QD-R001-ERNF
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - Application of the substance / the mixture
Cosmetic industry
Chemical production
Solvents
 - Uses advised against Foodstuffs
- **1.3 Details of the supplier of the safety data sheet**
 - Manufacturer/Supplier:
Brüggemann Alcohol Heilbronn GmbH
Salzstraße 129
74076 Heilbronn
phone: +49 7131 1575-0
fax: +49 7131 1575-888
e-mail: alcohol@brueggemann.com
 - Further information obtainable from: ehs@brueggemann.com
- **1.4 Emergency telephone number:** +49 761 19240 (english language)

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 product is classified and labelled according to the CLP regulation.
 - Hazard pictograms

GHS02 GHS07
 - 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.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

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- P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container to an approved waste disposal plant.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**

- **PBT:** Does not meet the PBT criteria according to annex XIII of Regulation (EC) No 1907/2006.
- **vPvB:** Does not meet the vPvB criteria according to annex XIII of Regulation (EC) No 1907/2006.

SECTION 3: Composition/information on ingredients· **3.1 Mixtures**· **Dangerous components:**

CAS: 64-17-5	ethanol	50-100%
EINECS: 200-578-6	Flam. Liq. 2, H225; Eye Irrit. 2, H319	
Index number: 603-002-00-5	Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	

- **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:**

Take affected persons out of danger area and lay down.
Take affected persons out into the fresh air.
Keep warm, position comfortably and cover well.

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

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment in case of complaints.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
In case of unconsciousness place patient stably in side position for transportation.

· **4.2 Most important symptoms and effects, both acute and delayed**

Erythema.
Nausea

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures· **5.1 Extinguishing media**· **Suitable extinguishing agents:**

Alcohol resistant foam
BC powder
Carbon dioxide
Water spray
CO₂, sand, extinguishing powder.

- **For safety reasons unsuitable extinguishing agents:** Water with full jet

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- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
CO₂, CO
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Remove persons from danger area.
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep ignition sources away - Do not smoke.
Use explosion-proof apparatus / fittings and spark-proof tools.
- **6.2 Environmental precautions:**
Do not allow to enter sewers/ surface or ground water.
Prevent seepage into sewage system, workpits and cellars.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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**
Store in cool, dry place in tightly closed receptacles.
Provide solvent resistant, sealed floor.
Prophylactic skin protection recommended.
- **Information about fire - and explosion protection:**
Can form explosive gas-air mixtures.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Take precautionary measures against static discharges.
Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Suitable material for receptacles and pipes: Stainless steel.
Store in a cool location.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 ethanol

AGW (Germany) Long-term value: 380 mg/m³, 200 ppm
4(II);DFG, Y

· **DNELs**

64-17-5 ethanol

Oral syst. 87 mg/kg_{bw}/d (consumer, long-term)

Dermal syst. 206 mg/kg_{bw}/d (consumer, long-term)
343 mg/kg_{bw}/d (worker, long-term)

Inhalative syst. 114 mg/m³ (consumer, long-term)
950 mg/m³ (worker, long-term)

· **PNECs**

64-17-5 ethanol

Aquatic 0,96 mg/L (freshwater)
2,75 mg/L (freshwater (intermittent releases))
0,79 mg/L (marine water)

STP 580 mg/L (STP)

Terrestrial 0,63 mg/kg_{dw} (soil)

oral 0,38 g/kg (food)

Sedimentary 3,6 mg/kg_{dw} (freshwater)
2,9 mg/kg_{dw} (marine water)

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **Respiratory protection:**

Use suitable respiratory protective device when high concentrations are present.

· **Hand protection**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.



Protective gloves

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

· **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material: $\geq 0,7$ mm

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Value for the permeation: Level ≤ 8 h

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

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- **As protection from splashes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

- **Eye/face protection**



Safety glasses with side shields (EN 166).

- **Body protection:**

Solvent resistant protective clothing

Protective work clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state	Fluid
· Colour:	Colourless
· Odour:	Alcohol-like
· Melting point/freezing point:	-114,5 °C (OECD 102, Ethanol)
· Boiling point or initial boiling point and boiling range	78 °C (OECD 103, Ethanol)
· Flammability	Highly flammable.
· Lower and upper explosion limit	
· Lower:	2,5 Vol % (ASTM E681-94, Ethanol)
· Upper:	13,5 Vol % (ASTM E681-94, Ethanol)
· Flash point:	13,5-18 °C (DIN 51755)
· Decomposition temperature:	>700 °C (OECD 102, Ethanol)
· pH (100 g/l) at 20 °C	5,9 (DIN EN ISO 10523)
· Solubility	
· water:	Soluble.
· Vapour pressure at 20 °C:	57,3 hPa (OECD 104, Ethanol)
· Density and/or relative density	
· Density at 20 °C:	0,80657 g/cm ³ (DIN EN ISO 787-10)

· 9.2 Other information

Fumes are heavier than air.

· **Appearance:**

· Form:	Liquid
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· **Important information on protection of health and environment, and on safety.**

· Ignition temperature:	363-425 °C (Ethanol, CSA)
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· **Information with regard to physical hazard classes**

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	
Highly flammable liquid and vapour.	
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void

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|---------------------------|------|
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:**
Reacts with strong acids.
Reacts with oxidising agents.
Forms explosive gas mixture with air.
- **10.4 Conditions to avoid:** Storage temperatures > 40 °C
- **10.5 Incompatible materials:**
alkaline metals
alkaline earth metals
- **10.6 Hazardous decomposition products:** Flammable gases/vapours

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
64-17-5 ethanol
Oral LD₅₀ 10.470 mg/kg (rat) (OECD 401)
Inhalative LC₅₀/4h 116,9 mg/L (rat) (OECD 403)
- **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.
- **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.
- **Subacute to chronic toxicity:**
64-17-5 ethanol
Oral NOAEL (90d) 1.730 mg/kg_{bw}/d (rat) (OECD 408)
Inhalative NOAEL (20d) >20 mg/L (rat) (OECD 403)
- **11.2 Information on other hazards**
- **Endocrine disrupting properties**
None of the ingredients is listed.

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SECTION 12: Ecological information· **12.1 Toxicity**· **Aquatic toxicity:**

ethanol:

64-17-5 ethanolEC₅₀ 275 mg/L /72h (chlorella vulgaris)EC₁₀ 11,5 mg/L /72h (chlorella vulgaris)EC₅₀ 857 mg/L (artemia salina, marine water, 48h)

5.012 mg/L (ceriodaphnia dubia, freshwater, 48h)

NOEC 9,6 mg/L (ceriodaphnia dubia, freshwater 10d)

79 mg/L /10d (palaemonetes pugio, marine water)

NOEC 250 mg/L (fish) (OECD 212)

LC₅₀ 11.200 mg/L (oncorhynchus mykiss) (ASTN E729-80)· **12.2 Persistence and degradability**

Biodegradability (ethanol):

Readily biodegradable (OECD 301 B), >60% in 10d, freshwater)

· **12.3 Bioaccumulative potential**No remarkable bioaccumulation potential (log K_{ow} < 4 and BCF < 500)

BCF = 3.2 (estimation based on a calculation method)

· **12.4 Mobility in soil** No further relevant information available.· **12.5 Results of PBT and vPvB assessment**· **PBT:** Does not meet the PBT criteria according to annex XIII of Regulation (EC) No 1907/2006.· **vPvB:** Does not meet the vPvB criteria according to annex XIII of Regulation (EC) No 1907/2006.· **12.6 Endocrine disrupting properties**

For information on endocrine disrupting properties see section 11.

· **12.7 Other adverse effects:**· **Behaviour in sewage processing plants:****64-17-5 ethanol**EC₅₀(4h) 5.800 mg/L (paramaecium caudatum) (non-guideline study)EC₅(72h) 65 mg/L (entosiphon sulcatumi) (DIN 38412, part 8)· **Additional ecological information:**· **According to the formulation contains the following heavy metals and compounds from the EU guideline 2006/11/EC:**

None.

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.

Disposal must be made according to official regulations.

· **Uncleaned packaging:**· **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.**SECTION 14: Transport information**· **14.1 UN number or ID number**· **ADR, IMDG, IATA**

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· 14.2 UN proper shipping name

· ADR

 1170 ETHANOL SOLUTION (ETHYL ALCOHOL
 SOLUTION)
 ETHANOL SOLUTION

· IMDG, IATA

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class

3 Flammable liquids.

· Label

3

· 14.4 Packing group

· ADR, IMDG, IATA

II

· 14.5 Environmental hazards:

· Marine pollutant:

No

· 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 Maritime transport in bulk according to
IMO instruments

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30
mlMaximum net quantity per outer packaging: 500
ml

· Transport category

2

· Tunnel restriction code

D/E

· ADN

· Remarks:

not tested

· IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30
mlMaximum net quantity per outer packaging: 500
ml

· UN "Model Regulation":

UN 1170 ETHANOL SOLUTION (ETHYL
ALCOHOL SOLUTION), 3, II
SECTION 15: Regulatory information

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

Ozone layer depleting substances: Not subject to regulation (EC) No. 1005/2009.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· Seveso category P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t

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· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

None of the ingredients is listed.

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

· **Regulation (EU) No 649/2012**

None of the ingredients is listed.

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

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

· **National regulations:**

· **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

· **15.2 Chemical safety assessment:**

Ethanol:

A Chemical Safety Assessment has 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.

· **Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 (CLP)**

· **Relevant phrases**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

· **Classification according to Regulation (EC) No 1272/2008**

Flammable liquids

Bridging principles

Serious eye damage/eye irritation The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· **Date of previous version:** 27.08.2020

· **Version number of previous version:** 6

· **Abbreviations and acronyms:**

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

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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)

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**Safety data sheet**
according to 1907/2006/EC, Article 31

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DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· *** Data compared to the previous version altered.**

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