

**Safety Data Sheet**

according to UK REACH Regulation

**Ethanol**

Revision date: 20.01.2023

Product code: PES-0102-R-V6

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Ethanol

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****1.3. Details of the supplier of the safety data sheet**

Company name: ABX advanced biochemical compounds  
 Biomedizinische Forschungsreagenzien GmbH  
 Street: Heinrich-Gläser-Straße 10-14  
 Place: 01454 Radeberg  
 Telephone: +49 3528 4041 60      Telefax: +49 3528 4041 65  
 e-mail: info@abx.de  
 Contact person: Dr. Christoph Meyer      Telephone: +49 3528 4041 8732  
 e-mail: meyer@abx.de  
 Internet: http://www.abx.de

**1.4. Emergency telephone number:**

+49 3528 4041 60

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Flam. Liq. 2; H225

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Signal word:** Danger**Pictograms:****Hazard statements**

H225 Highly flammable liquid and vapour.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P233 Keep container tightly closed.  
 P240 Ground and bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting equipment.  
 P242 Use non-sparking tools.  
 P243 Take action to prevent static discharges.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P403+P235 Store in a well-ventilated place. Keep cool.

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**SECTION 3: Composition/information on ingredients****3.1. Substances****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol; ethyl alcohol			95 - < 100 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2; H225			

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

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64-17-5	200-578-6	ethanol; ethyl alcohol	95 - < 100 %
	inhalation: LC50 = 95,6 mg/l (vapours); oral: LD50 = 6200 mg/kg		

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Provide fresh air.

**After contact with skin**

After contact with skin, wash immediately with: Water. Change contaminated clothing.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

If swallowed, immediately drink: Water.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Water. Carbon dioxide (CO<sub>2</sub>). Foam. Extinguishing powder.**5.2. Special hazards arising from the substance or mixture**

Combustible. Vapours may form explosive mixtures with air.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove all sources of ignition. Provide adequate ventilation.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Explosion hazard.

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**6.3. Methods and material for containment and cleaning up****Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

**Advice on general occupational hygiene**

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

**Hints on joint storage**

Do not store together with: Material, rich in oxygen, oxidizing.

**Further information on storage conditions**

Maximum storage temperature: + 30

Protect against: Light.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

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

**8.2. Exposure controls****SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	liquid
Colour:	colourless
Melting point/freezing point:	-114 °C
Boiling point or initial boiling point and boiling range:	78 °C
Lower explosion limits:	3,5 vol. %
Upper explosion limits:	15 vol. %
Flash point:	12 °C
Vapour pressure: (at 20 °C)	58 hPa
Vapour pressure: (at 50 °C)	293 hPa
Density:	0,79 g/cm <sup>3</sup>

**SECTION 10: Stability and reactivity**

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**10.4. Conditions to avoid**

Keep away from heat. Ignition hazard.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64-17-5	ethanol; ethyl alcohol					
	oral	LD50 mg/kg	6200	Rat	IUCLID	
	inhalation (4 h) vapour	LC50	95,6 mg/l	Rat	RTECS	

**SECTION 12: Ecological information****12.1. Toxicity**

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64-17-5	ethanol; ethyl alcohol					
	Acute crustacea toxicity	EC50	9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID

**12.3. Bioaccumulative potential****Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
64-17-5	ethanol; ethyl alcohol	-0,31

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of UK REACH.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation.

**Contaminated packaging**

Water (with cleaning agent). Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	Ethanol
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1170
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<b>14.2. UN proper shipping name:</b>	Ethanol
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	Ethanol
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1170
<b>14.2. UN proper shipping name:</b>	Ethanol
<b>14.3. Transport hazard class(es):</b>	3
<b>14.4. Packing group:</b>	II
Hazard label:	3

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2004/42/EC (VOC): 99,5 %

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**SECTION 16: Other information****Relevant H and EUH statements (number and full text)**

H225 Highly flammable liquid and vapour.