

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

|                                  |  |
|----------------------------------|--|
| <b>Product Description:</b>      | <b>Ethanol 95% v/v</b>                   |
| <b>Cat No. :</b>                 | <b>E/0500/08, E/0500/17, E/0500/PC17</b> |
| <b>Synonyms</b>                  | Ethyl alcohol                            |
| <b>Index No</b>                  | 603-002-00-5                             |
| <b>CAS No</b>                    | 64-17-5                                  |
| <b>EC No</b>                     | 200-578-6                                |
| <b>Molecular Formula</b>         | C <sub>2</sub> H <sub>6</sub> O          |
| <b>REACH registration number</b> | 01-2119457610-43                         |

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

|                                       |   |
|---------------------------------------|---|
| <b>Recommended Use</b>                | Laboratory chemicals.   |
| <b>Sector of use</b>                  | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites    |
| <b>Product category</b>               | PC21 - Laboratory chemicals   |
| <b>Process categories</b>             | PROC15 - Use as a laboratory reagent  |
| <b>Environmental release category</b> | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| <b>Uses advised against</b>           | No Information available  |

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

#### Company

**UK entity/business name**  
Fisher Scientific UK  
Bishop Meadow Road, Loughborough,  
Leicestershire LE11 5RG, United Kingdom

**EU entity/business name**  
Thermo Fisher Scientific  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium

**E-mail address** [begel.sdsdesk@thermofisher.com](mailto:begel.sdsdesk@thermofisher.com)

### 1.4. Emergency telephone number

Tel: 01509 231166  
Chemtrec US: (800) 424-9300  
Chemtrec EU: 001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567**

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## Physical hazards

Flammable liquids

Category 2 (H225)

## Health hazards

Serious Eye Damage/Eye Irritation

Category 2 (H319)

## Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

## 2.2. Label elements



Signal Word

Danger

## Hazard Statements

H225 - Highly flammable liquid and vapor

H319 - Causes serious eye irritation

## Precautionary Statements

P280 - Wear eye protection/ face protection

P264 - Wash face, hands and any exposed skin thoroughly after handling

P337 + P313 - If eye irritation persists: Get medical advice/attention

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

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

## 2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

This product does not contain any known or suspected endocrine disruptors

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component     | CAS No  | EC No     | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|---------------|---------|-----------|----------|---|
| Ethyl alcohol | 64-17-5 | 200-578-6 | 95-100   | Flam. Liq. 2 (H225)<br>Eye Irrit. 2 (H319)  |

| Component | Specific concentration limits | M-Factor | Component notes |
|-----------|-------------------------------|----------|-----------------|
|-----------|-------------------------------|----------|-----------------|

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|               |  | (SCL's)                |   |   |
|---------------|--|------------------------|---|---|
| Ethyl alcohol |  | Eye Irrit. 2 :: C>=50% | - | - |

|                                  |                  |
|----------------------------------|------------------|
| <b>REACH registration number</b> | 01-2119457610-43 |
|----------------------------------|------------------|

Full text of Hazard Statements: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|   |   |
|---|---|
| <b>General Advice</b>                     | If symptoms persist, call a physician.  |
| <b>Eye Contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.   |
| <b>Skin Contact</b>                       | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| <b>Ingestion</b>                          | Clean mouth with water and drink afterwards plenty of water.  |
| <b>Inhalation</b>                         | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.      |
| <b>Self-Protection of the First Aider</b> | Remove all sources of ignition.   |

### 4.2. Most important symptoms and effects, both acute and delayed

None reasonably foreseeable. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically. Symptoms may be delayed.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

#### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Vapors may form explosive mixtures with air.

#### Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full

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protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

### 6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

#### **Hygiene Measures**

When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area.

**Technical Rules for Hazardous Substances (TRGS) 510**      Class 3  
**Storage Class (LGK) (Germany)**

### 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### **Exposure limits**

List source(s): **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

| Component | The United Kingdom | European Union | Ireland |
|-----------|--------------------|----------------|---------|
|-----------|--------------------|----------------|---------|

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|               |  |                       |
|---------------|--|-----------------------|
| Ethyl alcohol | TWA: 1000 ppm TWA; 1920 mg/m <sup>3</sup> TWA<br>WEL - STEL: 3000 ppm<br>STEL; 5760 mg/m <sup>3</sup> STEL | STEL: 1000 ppm 15 min |
|---------------|--|-----------------------|

### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

### Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component                           | Acute effects local (Oral) | Acute effects systemic (Oral) | Chronic effects local (Oral) | Chronic effects systemic (Oral) |
|-------------------------------------|----------------------------|-------------------------------|------------------------------|---------------------------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) |                            | DNEL = 87 mg/kg bw/d          |                              |                                 |

| Component                           | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|-------------------------------------|------------------------------|---------------------------------|--------------------------------|-----------------------------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) |                              |                                 |                                | DNEL = 343mg/kg bw/day            |

| Component                           | Acute effects local (Inhalation) | Acute effects systemic (Inhalation) | Chronic effects local (Inhalation) | Chronic effects systemic (Inhalation) |
|-------------------------------------|----------------------------------|-------------------------------------|------------------------------------|---------------------------------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) | DNEL = 1900mg/m <sup>3</sup>     |                                     |                                    | DNEL = 950mg/m <sup>3</sup>           |

### Predicted No Effect Concentration (PNEC)

See values below.

## 8.2. Exposure controls

### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

### Personal protective equipment

#### Eye Protection

Goggles (European standard - EN 166)

#### Hand Protection

Protective gloves

| Glove material | Breakthrough time | Glove thickness   | EU standard | Glove comments   |
|----------------|-------------------|-------------------|-------------|--|
| Butyl rubber   | > 480 minutes     | 0.38 mm - 0.56 mm | EN 374      | As tested under EN374-3 Determination of Resistance to Permeation by Chemicals |
| Neoprene       | > 480 minutes     | 0.45 mm           | Level 6     |  |
| Viton (R)      | > 480 minutes     | 0.30 mm           |             |  |
| Nitrile rubber | < 60 minutes      | 0.18 mm           |             |  |

#### Skin and body protection

Long sleeved clothing.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger

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of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

|  |   |
|--|---|
| <b>Respiratory Protection</b>          | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.<br>To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly   |
| <b>Large scale/emergency use</b>       | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced<br><b>Recommended Filter type:</b> Organic gases and vapours filter Type A Brown conforming to EN14387  |
| <b>Small scale/Laboratory use</b>      | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.<br><b>Recommended half mask:-</b> Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141<br>When RPE is used a face piece Fit Test should be conducted |
| <b>Environmental exposure controls</b> | Prevent product from entering drains. Do not allow material to contaminate ground water system.   |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|  |   |  |
|--|---|--|
| <b>Physical State</b>                          | Liquid  |  |
| <b>Appearance</b>                              | Clear, Colorless                                |  |
| <b>Odor</b>                                    | sweet, Characteristic                           |  |
| <b>Odor Threshold</b>                          | No data available                               |  |
| <b>Melting Point/Range</b>                     | -114 °C / -173.2 °F                             |  |
| <b>Softening Point</b>                         | No data available                               |  |
| <b>Boiling Point/Range</b>                     | 78 °C / 172.4 °F                                |  |
| <b>Flammability (liquid)</b>                   | Highly flammable                                | On basis of test data                    |
| <b>Flammability (solid,gas)</b>                | Not applicable                                  | Liquid                                   |
| <b>Explosion Limits</b>                        | <b>Lower</b> 3.3 vol %<br><b>Upper</b> 19 vol % |  |
| <b>Flash Point</b>                             | 13 - 17 °C / 55.4 - 62.6 °F                     | <b>Method</b> - No information available |
| <b>Autoignition Temperature</b>                | 363 °C / 685.4 °F                               |  |
| <b>Decomposition Temperature</b>               | No data available                               |  |
| <b>pH</b>                                      | No information available                        |  |
| <b>Viscosity</b>                               | No data available                               |  |
| <b>Water Solubility</b>                        | Soluble   |  |
| <b>Solubility in other solvents</b>            | No information available                        |  |
| <b>Partition Coefficient (n-octanol/water)</b> |   |  |
| <b>Component</b>                               | <b>log Pow</b>                                  |  |
| Ethyl alcohol                                  | -0.32   |  |
| <b>Vapor Pressure</b>                          | No data available                               |  |
| <b>Density / Specific Gravity</b>              | 0.80  |  |
| <b>Bulk Density</b>                            | Not applicable                                  | Liquid                                   |
| <b>Vapor Density</b>                           | No data available                               | (Air = 1.0)                              |
| <b>Particle characteristics</b>                | (liquid) Not applicable                         |  |

### 9.2. Other information

|                             |   |
|-----------------------------|---|
| <b>Molecular Formula</b>    | C2 H6 O                                     |
| <b>Molecular Weight</b>     | 46.07                                       |
| <b>Explosive Properties</b> | Vapors may form explosive mixtures with air |

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## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None known, based on information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

#### Hazardous Polymerization Hazardous Reactions

Hazardous polymerization does not occur.  
None under normal processing.

### 10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Incompatible products.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Acid anhydrides. Acid chlorides.

### 10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product Information

#### (a) acute toxicity;

Oral

Based on available data, the classification criteria are not met

Dermal

Based on available data, the classification criteria are not met

Inhalation

Based on available data, the classification criteria are not met

| Component     | LD50 Oral  | LD50 Dermal | LC50 Inhalation   |
|---------------|--|-------------|---|
| Ethyl alcohol | LD50 = 10470 mg/kg<br>OECD 401 (Rat)<br>3450 mg/kg ( Mouse ) | -           | LC50 = 117-125 mg/l (4h)<br>OECD 403 (rat)<br>20000 ppm/10H (rat) |

#### (b) skin corrosion/irritation;

Based on available data, the classification criteria are not met

#### (c) serious eye damage/irritation;

Category 2

#### (d) respiratory or skin sensitization;

Respiratory

Based on available data, the classification criteria are not met

Skin

Based on available data, the classification criteria are not met

| Component                           | Test method  | Test species | Study result    |
|-------------------------------------|--|--------------|-----------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) | Mouse Ear Swelling Test (MEST)                             | mouse        | non-sensitising |
|                                     | -----<br>OECD Test Guideline 429<br>Local Lymph Node Assay | mouse        | non-sensitising |

#### (e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

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| Component                           | Test method                                   | Test species          | Study result |
|-------------------------------------|---|-----------------------|--------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) | AMES test<br>OECD Test Guideline 471          | in vitro<br>Bacteria  | negative     |
|                                     | Gene cell mutation<br>OECD Test Guideline 476 | in vitro<br>Mammalian | negative     |

Mutagenic effects have occurred in humans

**(f) carcinogenicity;**

Based on available data, the classification criteria are not met

The table below indicates whether each agency has listed any ingredient as a carcinogen

**(g) reproductive toxicity;**

Based on available data, the classification criteria are not met

| Component                           | Test method             | Test species / Duration      | Study result          |
|-------------------------------------|-------------------------|------------------------------|-----------------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) | OECD Test Guideline 416 | Oral / mouse<br>2 Generation | NOAEL = 13.8 g/kg/day |
|                                     | OECD Test Guideline 414 | Inhalation / Rat             | NOAEC =<br>16000 ppm  |

**Developmental Effects  
Teratogenicity**

Substances known to cause developmental toxicity in humans.  
Teratogenic effects have occurred in humans.

**(h) STOT-single exposure;**

Based on available data, the classification criteria are not met

**(i) STOT-repeated exposure;**

Based on available data, the classification criteria are not met

**Target Organs**

None known.

**(j) aspiration hazard;**

Based on available data, the classification criteria are not met

**Other Adverse Effects**

Tumorigenic effects have been reported in experimental animals.

**Symptoms / effects, both acute and delayed**

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

**11.2. Information on other hazards**

**Endocrine Disrupting Properties**

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

**Ecotoxicity effects**

Contains a substance which is: Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

| Component     | Freshwater Fish  | Water Flea                                    | Freshwater Algae                           |
|---------------|--|---|--|
| Ethyl alcohol | Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h | EC50 = 9268 mg/L/48h<br>EC50 = 10800 mg/L/24h | EC50 (72h) = 275 mg/l (Chlorella vulgaris) |

| Component     | Microtox                                 | M-Factor |
|---------------|--|----------|
| Ethyl alcohol | Photobacterium phosphoreum: EC50 = 34634 |          |



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|  |  |  |
|--|--|--|
|  | mg/L/30 min<br>Photobacterium phosphoreum:EC50 = 35470<br>mg/L/5 min |  |
|--|--|--|

## 12.2. Persistence and degradability

### Persistence

Persistence is unlikely, based on information available.

| Component                           | Degradability   |
|-------------------------------------|-----------------|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) | OECD 301E = 94% |

### Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

## 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

| Component     | log Pow | Bioconcentration factor (BCF) |
|---------------|---------|-------------------------------|
| Ethyl alcohol | -0.32   | No data available             |

## 12.4. Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.

## 12.5. Results of PBT and vPvB assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

## 12.6. Endocrine disrupting properties

### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

## 12.7. Other adverse effects

### Persistent Organic Pollutant

### Ozone Depletion Potential

This product does not contain any known or suspected substance  
This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues/Unused Products

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

#### Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

#### European Waste Catalogue (EWC)

According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

#### Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations.

## SECTION 14: TRANSPORT INFORMATION

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## IMDG/IMO

**14.1. UN number** UN1170  
**14.2. UN proper shipping name** ETHANOL  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

## ADR

**14.1. UN number** UN1170  
**14.2. UN proper shipping name** ETHANOL  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

## IATA

**14.1. UN number** UN1170  
**14.2. UN proper shipping name** ETHANOL  
**14.3. Transport hazard class(es)** 3  
**14.4. Packing group** II

**14.5. Environmental hazards** No hazards identified  
**14.6. Special precautions for user** No special precautions required.  
**14.7. Maritime transport in bulk according to IMO instruments** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

#### International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component     | CAS No  | EINECS    | ELINCS | NLP | IECSC | TCSI | KECL     | ENCS | ISHL |
|---------------|---------|-----------|--------|-----|-------|------|----------|------|------|
| Ethyl alcohol | 64-17-5 | 200-578-6 | -      | -   | X     | X    | KE-13217 | X    | X    |

| Component     | CAS No  | TSCA | TSCA Inventory notification - Active-Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
|---------------|---------|------|---|-----|------|------|-------|-------|
| Ethyl alcohol | 64-17-5 | X    | ACTIVE  | X   | -    | X    | X     | X     |

**Legend:** X - Listed '-' - Not Listed      **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**Authorisation/Restrictions according to EU REACH** Not applicable

| Component     | CAS No  | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---------------|---------|---|---|---|
| Ethyl alcohol | 64-17-5 | -   | -   | -   |

**Seveso III Directive (2012/18/EC)**

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| Component     | CAS No  | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|---------------|---------|---|--|
| Ethyl alcohol | 64-17-5 | Not applicable  | Not applicable   |

**Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals**

Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

## National Regulations

**UK** - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

**WGK Classification** See table for values

| Component     | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|---------------|---------------------------------------|-------------------------|
| Ethyl alcohol | WGK1                                  |                         |

| Component     | France - INRS (Tables of occupational diseases)      |
|---------------|--|
| Ethyl alcohol | Tableaux des maladies professionnelles (TMP) - RG 84 |

| Component                           | Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81) | Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC) | Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure |
|-------------------------------------|--|---|---|
| Ethyl alcohol<br>64-17-5 ( 95-100 ) |  | Group I   |   |

## 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

## SECTION 16: OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

H225 - Highly flammable liquid and vapor

### Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

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**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer  
Predicted No Effect Concentration (PNEC)

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**IMO/MDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

## Key literature references and sources for data

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - (Volatile Organic Compound)

## Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Chemical incident response training.

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**This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.**

## Disclaimer

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**End of Safety Data Sheet**