

## SAFETY DATA SHEET

## Ethanol 70%

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

## 1.1. Product identifier

## Trade name

Ethanol 70%

## Unique formula identifier (UFI)

WWHA-3GW4-MQ8G-F0X3

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

## Relevant identified uses of the substance or mixture

Solvent - Industrial purposes.

Restricted to professional users.

## Uses advised against

None known.

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

## Company and address

**Solveco AB**

Tallbacksgatan 10

S-195 72 Rosersberg

Sweden

T: +46 (0)8 732 72 75

F: +46 (0)8 732 72 76

<http://www.solveco.se>

## Contact person

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## E-mail

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## Revision

20/10/2023

## SDS Version

3.0

## Date of previous version

04/10/2023 (3.0)

## 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

## SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

## 2.1. Classification of the substance or mixture

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

Eye Irrit. 2; H319, Causes serious eye irritation.

## 2.2. Label elements

## Hazard pictogram(s)



## Signal word

Danger

## Hazard statement(s)

Highly flammable liquid and vapour. (H225)

Causes serious eye irritation. (H319)

## Precautionary statement(s)

### General

-

### Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)  
Wear face protection/protective gloves/protective clothing. (P280)

### Response

If eye irritation persists: Get medical advice/attention. (P337+P313)  
In case of fire: Use water mist/carbon dioxide/alcohol-resistant foam to extinguish. (P370+P378)

### Storage

Store in a well-ventilated place. Keep cool. (P403+P235)

### Disposal

Dispose of contents/container in accordance with local regulation (P501)

## Hazardous substances

Ethanol

### Additional labelling

UFI: WWHA-3GW4-MQ8G-F0X3

## 2.3. Other hazards

### Additional warnings

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable. This product is a mixture.

### 3.2. Mixtures

| Product/substance | Identifiers   | % w/w | Classification                           | Note |
|-------------------|---|-------|--|------|
| Ethanol           | CAS No.: 64-17-5<br>EC No.: 200-578-6<br>UK-REACH:<br>Index No.: 603-002-00-5 | 62,5% | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319 |      |
| Water             | CAS No.: 7732-18-5<br>EC No.: 231-791-2<br>UK-REACH:<br>Index No.:            | 37,5% |  |      |

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

## Other information

-

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.  
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

#### Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and

continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system.

Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Highly flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

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

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

#### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Ground and bond container and receiving equipment.

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

Use non-sparking tools.

Take action to prevent static discharges.

Because of the danger of self-ignition, any waste from the product, spray mist and soiled rags etc. are to be kept in a fire-proof place in air-tight containers, alternatively the waste is to be burned.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage temperature

Dry, cool and well ventilated

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Ethanol

Long term exposure limit (8 hours) (ppm): 1000

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 1920

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.  
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

#### DNEL

No data available.

#### PNEC

No data available.

### 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

#### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

#### Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

#### Measures to avoid environmental exposure

No specific requirements.

#### Individual protection measures, such as personal protective equipment

Generally

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Use only UKCA marked protective equipment.

#### Respiratory Equipment

| Work situation | Type | Class | Colour | Standards |
|----------------|------|-------|--------|-----------|
|----------------|------|-------|--------|-----------|

|   |   |   |       |         |
|---|---|---|-------|---------|
| If ventilation at the work place is insufficient, use a half- or full mask with an appropriate filter or an air-supplied breathing apparatus. | A | - | Brown | EN14387 |
|---|---|---|-------|---------|



#### Skin protection

| Recommended | Type/Category | Standards |
|-------------|---------------|-----------|
|-------------|---------------|-----------|

|   |   |   |
|---|---|---|
| Dedicated work clothing should be worn. | - | - |
|---|---|---|



#### Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards |
|----------|----------------------|--------------------------|-----------|
|----------|----------------------|--------------------------|-----------|

|         |   |   |         |
|---------|---|---|---------|
| Nitrile | - | - | EN374-2 |
|---------|---|---|---------|



|       |   |   |                                |
|-------|---|---|--------------------------------|
| Butyl | - | - | EN374-2, EN374-3, EN388, EN421 |
|-------|---|---|--------------------------------|



#### Eye protection

| Type | Standards |
|------|-----------|
|------|-----------|

|  |       |
|--|-------|
| In the likelihood of direct or incidental exposure, use face protection or safety glasses with side shields. | EN166 |
|--|-------|

## SECTION 9: Physical and chemical properties

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

#### Physical state

Liquid

#### Colour

Clear

#### Odour / Odour threshold

Characteristic (Odour threshold: ~ 350 ppm)

#### pH

Testing not relevant or not possible due to the nature of the product.

#### Density (g/cm<sup>3</sup>)

0.89

#### Kinematic viscosity

Testing not relevant or not possible due to the nature of the product.

#### Particle characteristics

Does not apply to liquids.

#### Phase changes

##### Melting point/Freezing point (°C)

Testing not relevant or not possible due to the nature of the product.

##### Softening point/range (waxes and pastes) (°C)

Does not apply to liquids.

##### Boiling point (°C)

78.5

**Vapour pressure**

5.9 kPa (20 °C)

**Relative vapour density**

Testing not relevant or not possible due to the nature of the product.

**Decomposition temperature (°C)**

Testing not relevant or not possible due to the nature of the product.

**Data on fire and explosion hazards****Flash point (°C)**

&lt; 21

**Flammability (°C)**

425

**Auto-ignition temperature (°C)**

Testing not relevant or not possible due to the nature of the product.

**Lower and upper explosion limit (% v/v)**

3.3 - 19

**Solubility****Solubility in water**

Completely soluble

**n-octanol/water coefficient**

Testing not relevant or not possible due to the nature of the product.

**Solubility in fat (g/L)**

Testing not relevant or not possible due to the nature of the product.

**9.2. Other information****Other physical and chemical parameters**

No data available.

**Oxidizing properties**

Testing not relevant or not possible due to the nature of the product.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

The product is stable under the conditions, noted in section 7 "Handling and storage".

**10.3. Possibility of hazardous reactions**

None known.

**10.4. Conditions to avoid**

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

|                    |               |
|--------------------|---------------|
| Product/substance  | Ethanol       |
| Species:           | Rat           |
| Route of exposure: | Oral          |
| Test:              | LD50          |
| Result:            | 6200.00 mg/kg |

|                    |                 |
|--------------------|-----------------|
| Product/substance  | Ethanol         |
| Species:           | Rabbit          |
| Route of exposure: | Dermal          |
| Test:              | LD50            |
| Result:            | >20000.00 mg/kg |

|                    |                |
|--------------------|----------------|
| Product/substance  | Ethanol        |
| Species:           | Rat            |
| Route of exposure: | Inhalation     |
| Test:              | LC50 (4 hours) |
| Result:            | 124.70 mg/L    |

#### Skin corrosion/irritation

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

#### Serious eye damage/irritation

Causes serious eye irritation.

#### Respiratory sensitisation

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

#### 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.

### 11.2. Information on other hazards

#### Long term effects

**Irritation effects:** This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.  
**Neurotoxic effects:** This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### Endocrine disrupting properties

This mixture/product does not contain any substances considered to have hormone-disrupting properties in relation to health.

#### ▼ Other information

None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

|                   |                                     |
|-------------------|-------------------------------------|
| Product/substance | Ethanol                             |
| Species:          | Fish ( <i>Pimephales promelas</i> ) |
| Duration:         | 96 hours                            |
| Test:             | LC50                                |
| Result:           | 13480.00 mg/L                       |

|                   |  |
|-------------------|--|
| Product/substance | Ethanol                                  |
| Species:          | Algae ( <i>Scenedesmus subspicatus</i> ) |
| Duration:         | 7 days                                   |
| Test:             | IC50                                     |
| Result:           | 5000.00 mg/L                             |

|                   |                                  |
|-------------------|----------------------------------|
| Product/substance | Ethanol                          |
| Species:          | Daphnia ( <i>Daphnia magna</i> ) |
| Duration:         | 48 hours                         |
| Test:             | EC50                             |
| Result:           | 5400.00 mg/L                     |

Product/substance Ethanol  
 Species: Algae  
 Duration: 72 hours  
 Test: IC50  
 Result: >10.9 mg/L

#### 12.2. Persistence and degradability

Product/substance Ethanol  
 Biodegradable: Yes  
 Test method: BOD5/COD  
 Result: 0.4 - 0.8

#### 12.3. Bioaccumulative potential

Product/substance Ethanol  
 Potential bioaccumulation: No  
 LogPow: No data available.  
 BCF: < 10

#### 12.4. Mobility in soil

No data available.

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

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

#### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

#### 12.7. Other adverse effects

None known.

### SECTION 13: Disposal considerations

#### 13.1. ▼Waste treatment methods

Product is covered by the regulations on hazardous waste. (\*)

HP 3 - Flammable

HP 4 - Irritant (skin irritation and eye damage)

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

#### EWC code

20 01 13\* Solvents

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

### SECTION 14: Transport information

|      | 14.1<br>UN / ID | 14.2<br>UN proper shipping name  | 14.3<br>Hazard class(es)   | 14.4<br>PG* | 14.5<br>Env** | Other<br>information:  |
|------|-----------------|--|--|-------------|---------------|--|
| ADR  | 1170            | ETHANOL (ETHYL ALCOHOL) or<br>ETHANOL SOLUTION (ETHYL ALCOHOL<br>SOLUTION) | Transport hazard class: 3<br>Label: 3<br>Classification code: F1 | II          | No            | Tunnel<br>restriction<br>code: 2<br>(D/E)<br>See below for<br>additional<br>information. |
| IMDG | 1170            | ETHANOL (ETHYL ALCOHOL) or<br>ETHANOL SOLUTION (ETHYL ALCOHOL<br>SOLUTION) | Transport hazard class: 3<br>Label: 3<br>Classification code: F1 | II          | No            | EmS: F-E S-D<br>See below for<br>additional<br>information.                              |
| IATA | 1170            | ETHANOL (ETHYL ALCOHOL) or<br>ETHANOL SOLUTION (ETHYL ALCOHOL<br>SOLUTION) | Transport hazard class: 3<br>Label: 3<br>Classification code: F1 | II          | No            | See below for<br>additional<br>information.  |

\* Packing group



**\*\* Environmental hazards****Additional information**

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

This product is within scope of the regulations of transport of dangerous goods.

**14.6. Special precautions for user**

Not applicable.

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

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

Restricted to professional users.

People under the age of 18 shall not be exposed to this product.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

**Demands for specific education**

No specific requirements.

**SEVESO - Categories / dangerous substances**

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

**Additional information**

Not applicable.

**Sources**

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

**15.2. Chemical safety assessment**

No

**SECTION 16: Other information****Full text of H-phrases as mentioned in section 3**

H225, Highly flammable liquid and vapour.

H319, Causes serious eye irritation.

**Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IARC = International Agency for Research on Cancer (IARC)  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
OECD = Organisation for Economic Co-operation and Development  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail  
RRN = REACH Registration Number  
SCL = A specific concentration limit  
SVHC = Substances of Very High Concern  
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure  
STOT-SE = Specific Target Organ Toxicity - Single Exposure  
TWA = Time weighted average  
UN = United Nations  
UVBC = Unknown or variable composition, complex reaction products or of biological materials  
VOC = Volatile Organic Compound  
vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

#### ▼ The safety data sheet is validated by

Christian Andersson

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en