Ethanol solution

02877-1L

Version 1.6 Revision Date 06.11.2025

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

1.1. Product identifier

Product name	:	Ethanol solution
SDS-number	:	000000020142
Type of product	:	Mixture
Remarks	:	SDS according to Art. 31 of Regulation (EC) 1907/2006.

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

Use of the Substance/Mixture	:	Laboratory chemicals
Uses advised against	:	none

1.3. Details of the supplier of the safety data sheet

Company	:	Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Solstice Advanced Materials US, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	:	(49) 5137-999 0	
For further information, please contact:	:	SafetyDataSheet@solstice.com	

1.4. Emergency telephone number

Emergency telephone number	:	+1-703-527-3887 (ChemTrec-Transport) +1 303-739-1378 (Medical)
	:	Poison Control Center: United Kingdom: (+44) 844 892 0111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Flammable liquids Category 2
H225 Highly flammable liquid and vapour.
Eye irritation Category 2
H319 Causes serious eye irritation.

2.2. Label elements

REGULATION (EC) No 1272/2008

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.
	P280	Wear protective gloves/ 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.
	P337 + P313	If eye irritation persists: Get medical advice/ attention.
	P403 + P235	Store in a well-ventilated place. Keep cool.

Hazardous components which must be listed on the label : ethyl alcohol

2.3. Other hazards

Possible risk of harm to the unborn child. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent,

bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	CAS-No. Index-No. EC-No.	Classification 1272/2008	Concentration	Remarks
ethyl alcohol	64-17-5 603-002-00-5 200-578-6	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 50 % - <= 100 %	Eye Irrit. 2; H319:>= 50 %

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
Take off all contaminated clothing immediately. Consult a physician for severe cases. No hazards which require special first aid measures.

Inhalation:
If inhaled, remove to fresh air. Call a physician immediately.

Skin contact:
Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician.

Eye contact:

Protect unharmed eye. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician.

Ingestion:
Call a physician immediately. Do NOT induce vomiting. Immediate medical attention is required. Never give anything by mouth to an unconscious person.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical
Cool closed containers exposed to fire with water spray.

Extinguishing media which shall not be used for safety reasons:
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.
In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

6.3. Methods and materials for containment and cleaning up

Ventilate the area.
No sparking tools should be used.
Use explosion-proof equipment.
Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:
Wear personal protective equipment. Use only in well-ventilated areas. Keep container tightly closed. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion:
The product is easily combustible. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Vapours may form explosive mixtures with air. Container hazardous when empty.

Hygiene measures:
When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Keep working clothes separately. Remove and wash contaminated clothing before re-use. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions:
Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not leave vessels/containers open Avoid product residues in/on containers.

Advice on common storage:
Do not store together with: Oxidizing agents

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
ethyl alcohol	EH40 WEL TWA	1.920 mg/m3 1.000 ppm		

EH40 WEL - UK. EH40 Workplace Exposure Limits (WELs), as amended
TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
ethyl alcohol	Workers / Acute local		1900 mg/m3	Inhalation	

	effects				
ethyl alcohol	Workers / Long-term systemic effects		343mg/kg bw/d	Skin contact	
ethyl alcohol	Workers / Long-term systemic effects		950 mg/m3	Inhalation	
ethyl alcohol	Consumers / Long-term systemic effects		114 mg/m3	Inhalation	
ethyl alcohol	Consumers / Acute local effects		950 mg/m3	Inhalation	
ethyl alcohol	Consumers / Long-term systemic effects		206mg/kg bw/d	Skin contact	
ethyl alcohol	Consumers / Long-term systemic effects		87mg/kg bw/d	Ingestion	

Component	Environmental compartment / Value	Remarks
ethyl alcohol	Fresh water: 0,96 mg/l	
ethyl alcohol	Marine water: 0,79 mg/l	
ethyl alcohol	Fresh water sediment: 3,6 mg/kg	
ethyl alcohol	Soil: 0,63 mg/kg	

8.2. Exposure controls

Occupational exposure controls

Do not breathe vapours/dust.
Take off all contaminated clothing immediately.
Recommended preventive skin protection
The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Engineering measures
Use with local exhaust ventilation.
Prevent vapour buildup by providing adequate ventilation during and after use.

Personal protective equipment
Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.
Recommended Filter type:
Organic vapour type

Respiratory protection:
In the case of vapour formation use a respirator with an approved filter.

Hand protection:
Glove material: butyl-rubber
Break through time: > 480 min
Glove thickness: 0,7 mm
Butoject® 898
Gloves must be inspected prior to use.
Replace when worn.
Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.
Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.
Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer reccomends to use the chemical protective glove in practice not longer than 50% of the recomended permeation time.
Manufacturer´s directions for use should be observed because of great diversity of types .
Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:
Safety goggles

Skin and body protection:
Flame retardant antistatic protective clothing.
Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire.

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state	:	liquid
(b) Colour	:	colourless
(c) Odour	:	characteristic
(d) Melting point/freezing point	:	No data available
(e) Boiling point/boiling range	:	77 °C
(g) Lower and upper explosion limit	:	Lower explosion limit No data available
	:	Upper explosion limit No data available
(h) Flash point	:	22 °C
(i) Auto-ignition temperature	:	No data available
(j) Decomposition temperature	:	At normal pressure may be distilled without decomposition. Fire or intense heat may cause violent rupture of packages.
(k) pH	:	No data available

(l) Viscosity, kinematic	:	No data available
(m) Solubility(ies)	:	Water solubility: completely miscible Solubility in other solvents: Soluble in most organic solvents
(n) Partition coefficient: n-octanol/water	:	log Pow -0,32
(o) Vapour pressure	:	128 hPa
(p) Density and / or relative density	:	0,886 g/cm3
(q) Relative vapour density	:	No data available
(r) Particle characteristics	:	No data available

9.2 Other Information

Polymer characteristics	:	No data available
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Evaporation rate	:	No data available
Viscosity, dynamic	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

At normal pressure may be distilled without decomposition.
Fire or intense heat may cause violent rupture of packages.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Keep away from direct sunlight.
Keep product and empty container away from heat and sources of ignition.
Vapours may ignite and explode.

10.5. Incompatible materials

Reactions with alkali metals.
Explosive reactions with oxidising agents such as potassium chlorate and/or peroxides.

10.6. Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide
Carbon dioxide (CO2)

SECTION 11: Toxicological information

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

(a) Acute toxicity

Acute oral toxicity:
LD50
Species: Rat
Value: 10.470 mg/kg
Method: OECD Test Guideline 401
Test substance: anhydrous substance

Acute dermal toxicity:
No data available

Acute inhalation toxicity:
LC50
Species: Rat
Value: 124,7 mg/l

Exposure time: 4 h
Method: OECD Test Guideline 403
Test substance: anhydrous substance

Acute toxicity (other routes of administration):
No data available

(b) Skin corrosion/irritation:
Species: Rabbit
Result: No skin irritation
Method: OECD Test Guideline 404
Test substance: anhydrous substance

(c) Serious eye damage/eye irritation:
Species: Rabbit
Result: Moderate eye irritation
Method: OECD Test Guideline 405
Test substance: anhydrous substance

(d) Respiratory or skin sensitisation:
Route of exposure: Skin contact
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406
Test substance: anhydrous substance

(e) Germ cell mutagenicity:
Test Method: Ames test
Result: negative
Method: OECD Test Guideline 471
Test substance: anhydrous substance

Test Method: In vitro gene mutation study in mammalian cells
Result: negative
Method: OECD Test Guideline 476
Test substance: anhydrous substance

Test Method: Chromosome aberration test
Method: OECD Test Guideline 478
Test substance: anhydrous substance
Result: equivocal

(f) Carcinogenicity:

Species: not specified
Note: Not classified due to data which are conclusive although insufficient for classification.

(g) Reproductive toxicity:
Species: Rat
Developmental Toxicity: NOAEL: 5.200 mg/kg bw/d
Remarks: anhydrous substance
(h) STOT-single exposure:
No data available

(i) STOT - repeated exposure:
Species: Rat, male
Application Route: Oral
Exposure time: 90 d
LOAEL: 3.156 mg/kg
Test substance: anhydrous substance
Method: OECD 408

(j) Aspiration hazard:
No data available

11.2. Information on other hazards

Endocrine disrupting properties
No data available

Other information:
Solvent removes skin oil from the skin.
Solvent vapours have a narcotic effect if inhaled in high concentrations.
Poisoning affects the central nervous system.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:
LC50
Species: Pimephales promelas (fathead minnow)
Value: 14.200 mg/l
Exposure time: 96 h
Test substance: anhydrous substance

NOEC
semi-static test

Species: Danio rerio (zebra fish)
Value: 250 mg/l
Exposure time: 120 h
Method: OECD Test Guideline 212
Test substance: anhydrous substance

Toxicity to aquatic plants:
EC50
Growth rate
Species: Chlorella vulgaris (Fresh water algae)
Value: 275 mg/l
Exposure time: 3 d
Method: OECD Test Guideline 201
Test substance: anhydrous substance

EC50
Growth rate
Species: Chlorella vulgaris (Fresh water algae)
Value: 675 mg/l
Exposure time: 4 d
Method: OECD Test Guideline 201
Test substance: anhydrous substance

EC50
Biomass
Species: Lemna gibba (gibbous duckweed)
Value: 5.967 mg/l
Exposure time: 7 d
Test substance: anhydrous substance

NOEC
Biomass
Species: Lemna gibba (gibbous duckweed)
Value: 5.967 mg/l
Exposure time: 7 d
Test substance: anhydrous substance

Toxicity to aquatic invertebrates:
LC50
static test
Species: Ceriodaphnia dubia (water flea)

Value: 5.012 mg/l
Exposure time: 48 h
Test substance: anhydrous substance

Chronic toxicity to aquatic invertebrates:
NOEC
semi-static test
Species: Ceriodaphnia dubia (water flea)
Value: 9,6 mg/l
Exposure time: 10 d
Test substance: anhydrous substance

Chronic toxicity to aquatic invertebrates:
LC50
Reproduction Test
semi-static test
Species: Ceriodaphnia dubia (water flea)
Value: 1.806 mg/l
Exposure time: 10 d
Test substance: anhydrous substance

Chronic toxicity to aquatic invertebrates:
NOEC
semi-static test
Species: Daphnia magna (Water flea)
Value: 9,6 mg/l
Exposure time: 9 d
Test substance: anhydrous substance

Chronic toxicity to aquatic invertebrates:
LC50
Reproduction Test
semi-static test
Species: Daphnia magna (Water flea)
Value: 454 mg/l
Exposure time: 9 d
Test substance: anhydrous substance

12.2. Persistence and degradability

Biodegradability:
aerobic
Biodegradation: 95 %

Exposure time: 15 d
Result: Readily biodegradable.
Test substance: anhydrous substance

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Not very persistent and very bioaccumulative (vPvB).
Not persistent, bioaccumulative, and toxic (PBT).

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:
Dispose according to legal requirements.

Packaging:
Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:
Provisions relating to waste:
EC Directive 2006/12/EC; 2008/98/EEC
Regulation No. 1013/2006
For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID:1170 IMDG:1170 IATA:1170

14.2 UN proper shipping name
ADR/RID:ETHANOL SOLUTION
IMDG:ETHANOL SOLUTION
IATA:Ethanol solution

14.3 Transport hazard class(es)
ADR/RID:3 IMDG: 3 IATA: 3

14.4 Packaging group
ADR/RID:II IMDG: II IATA: II

14.5 Environmental hazards
ADR/RID:no Marine pollutant: no

14.6 Special precautions for user
No data available

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of ≥ 0.1 % (w/w).
Directive 2012/18/EC Listed in Regulation : P5c: FLAMMABLE LIQUIDS	**Quantity**: 5.000 t **Quantity**: 50.000 t	

Other inventory information

USA. List of Active Substances on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory, as amended
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Domestic Substances List (DSL), as amended
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

ethyl alcohol	:	H225	Highly flammable liquid and vapour.
		H319	Causes serious eye irritation.

Further information

Ethanol solution

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All directives and regulations refer to amended versions.
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:
EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very biaccumulative substance
PBT Persistent, bioaccmulative und toxic substance

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