

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

1.1. Product identifier

Product form : Mixture
 Trade name : Septihol® Ethyl WFI Sterile Alcohol Solution
 Product code : 1S10

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
 Industrial
 Use of the substance/mixture : Surface cleaner

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:

STERIS Corporation
 P. O. Box 147, St. Louis, MO 63166, US
 Telephone Number for Information: 1-800-444-9009 (Customer Service-Scientific Products)
 US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

Supplier:

STERIS Ireland Limited
 IDA Business and Technology Park
 Tullamore
 County Offaly
 R35 X865
 Ireland.
 Product/Technical Information Phone No: +44 (0) 116 276 8636
 Email: asksteris_msds@steris.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1895 622 639

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 2 H225
 Eye Irrit. 2 H319
 STOT SE 2 H371

Full text of H-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger
 Hazardous ingredients : Methyl alcohol
 Hazard statements (CLP) : H225 - Highly flammable liquid and vapour
 H319 - Causes serious eye irritation
 H371 - May cause damage to organs
 Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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smoking
P233 - Keep container tightly closed
P280 - Wear protective gloves, clothing, eye and 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
P501 - Dispose of contents/container to Comply with applicable local, national and international regulation

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethyl alcohol (Self Classified)	(CAS No) 64-17-5 (EC no) 200-578-6 (EC index no) 603-002-00-5	60-70	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Isopropyl alcohol	(CAS No) 67-63-0 (EC no) 200-661-7 (EC index no) 603-117-00-0	3-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Methyl alcohol	(CAS No) 67-56-1 (EC no) 200-659-6 (EC index no) 603-001-00-X	3-5	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapour), H331 STOT SE 1, H370

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTER or doctor/physician
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. In all cases of doubt, or when symptoms persist, seek medical advice. Remove to fresh air and keep at rest in a position comfortable for breathing
First-aid measures after skin contact	: Immediately flush skin with plenty of water for at least 15 minutes. Remove/Take off immediately all contaminated clothing. Seek medical attention if irritation develops. Rinse skin with water/shower
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persist
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Give water or milk if the person is fully conscious

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

Symptoms/injuries	: May cause damage to organs. Causes damage to organs
Symptoms/injuries after inhalation	: In the event of insufficient ventilation: May cause drowsiness or dizziness
Symptoms/injuries after skin contact	: Frequent or prolonged contact with skin may cause dermal irritation
Symptoms/injuries after eye contact	: May cause slight irritation. Tearing
Symptoms/injuries after ingestion	: This material contains methanol, which, when ingested, has cards acidosis, ocular toxicity ranging from diminished visual capacity to complete blindness, and death

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Water fog. Alcohol foam. carbon dioxide (CO2). Foam. Dry powder. Carbon dioxide. Water spray. Sand
Unsuitable extinguishing media	: Do not use a heavy water stream

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5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour
Explosion hazard	: May form flammable/explosive vapour-air mixture
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide

5.3. Advice for firefighters

Precautionary measures fire	: Vapours may travel long distances along ground before igniting/flashing back to vapour source
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Evacuate personnel to a safe area
Protective equipment for firefighters	: Full protective flameproof clothing. Do not enter fire area without proper protective equipment, including respiratory protection. Wear positive pressure air supplied respirator if required by safe entry procedures
Other information	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Cool closed containers exposed to fire with water spray. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking. Avoid breathing mist or vapor
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6.1.1. For non-emergency personnel

Protective equipment	: Refer to section 8
Emergency procedures	: Evacuate unnecessary personnel. Keep upwind

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray
Emergency procedures	: Ventilate area

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Do not absorb in sawdust, paper, cloth or other combustible absorbents. Collect spillage. Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode. Store away from other materials. Small spills may be flushed with large amounts of water; larger spills should be collected for disposal. Prevent large quantities from entering sewers, watercourses or low areas
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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No naked lights. No smoking. Use only non-sparking tools. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Do not spray into eyes. Keep away from heat and direct sunlight. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood
Hygiene measures	: Wash hands thoroughly after handling

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation. Ventilation at floor level. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical equipment. A washing facility/water for eye and skin cleaning purposes should be present. Provide for an automatic sprinkler system. Ground/bond container and receiving equipment
Storage conditions	: Keep container tightly closed. Keep only in the original container in a cool well ventilated place. . Keep away from heat and direct sunlight
Incompatible products	: Strong bases. Strong acids
Incompatible materials	: Strong oxidizing agents. Sources of ignition. Direct sunlight. Heat sources
Heat and ignition sources	: Store away from excessive heat. Remove all sources of ignition. These can cause flammability/explosion hazards

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Isopropyl alcohol (67-63-0)		
United Kingdom	WEL TWA (mg/m ³)	999 mg/m ³
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m ³)	1250 mg/m ³
United Kingdom	WEL STEL (ppm)	500 ppm
USA - ACGIH	ACGIH TWA (ppm)	200 ppm
USA - ACGIH	ACGIH STEL (ppm)	400 ppm
USA - IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	980 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m ³
USA - NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Methyl alcohol (67-56-1)		
United Kingdom	WEL TWA (mg/m ³)	266 mg/m ³
United Kingdom	WEL TWA (ppm)	200 ppm
United Kingdom	WEL STEL (mg/m ³)	333 mg/m ³
United Kingdom	WEL STEL (ppm)	250 ppm
USA - ACGIH	ACGIH TWA (ppm)	200 ppm
USA - ACGIH	ACGIH STEL (ppm)	250 ppm
USA - IDLH	US IDLH (ppm)	6000 ppm
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	260 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
USA - NIOSH	NIOSH REL (STEL) (mg/m ³)	325 mg/m ³
USA - NIOSH	NIOSH REL (STEL) (ppm)	250 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	260 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	200 ppm

Ethyl alcohol (Self Classified) (64-17-5)		
United Kingdom	WEL TWA (mg/m ³)	1920 mg/m ³
United Kingdom	WEL TWA (ppm)	1000 ppm
United Kingdom	WEL STEL (mg/m ³)	5760 mg/m ³ (calculated)
United Kingdom	WEL STEL (ppm)	3000 ppm (calculated)
USA - ACGIH	ACGIH STEL (ppm)	1000 ppm
USA - IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
USA - NIOSH	NIOSH REL (TWA) (mg/m ³)	1900 mg/m ³
USA - NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	1900 mg/m ³
USA - OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

8.2. Exposure controls

Appropriate engineering controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation to minimize vapour concentrations. Use explosion-proof ventilating equipment

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Personal protective equipment : Avoid all unnecessary exposure. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Protective eyewear. Protective clothing. Gloves



Hand protection : Wear protective gloves. rubber gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Wear suitable protective clothing. Wear protective shoes
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. In case of insufficient ventilation, wear suitable respiratory equipment
Environmental exposure controls : Avoid release to the environment
Other information : Do not eat, drink or smoke during use. Wash contaminated clothing immediately

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Clear
Colour : Colourless
Odour : Alcohol odour
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : > 35 °C Mixture not tested
Flash point : 16,6 °C Closed cup
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Highly flammable liquid and vapour
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0,79 Specific Gravity
Solubility : Water: completely soluble
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions. Exposure to heat may cause bursting. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture. Not established

10.3. Possibility of hazardous reactions

Not established

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame

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10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents

10.6. Hazardous decomposition products

May release flammable gases. Unburned hydrocarbons. Fume. Carbon monoxide. Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Isopropyl alcohol (67-63-0)	
LD50 oral rat	4396 mg/kg
LD50 dermal rabbit	12800 mg/kg
LC50 inhalation rat (ppm)	16000 ppm (Exposure time: 8 h)
ATE (oral)	4396,000 mg/kg bodyweight
ATE (dermal)	12800,000 mg/kg bodyweight
Methyl alcohol (67-56-1)	
LD50 oral rat	5628 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 inhalation rat (mg/l)	130,7 mg/l/4h (lit. ECHA)
LC50 inhalation rat (Dust/Mist - mg/l/4h)	83,2 mg/l/4h
ATE (oral)	100,000 mg/kg bodyweight
ATE (dermal)	300,000 mg/kg bodyweight
ATE (vapours)	3,000 mg/l/4h
Ethyl alcohol (Self Classified) (64-17-5)	
LC50 inhalation rat (mg/l)	124,7 mg/l (Exposure time: 4 h)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause damage to organs May cause drowsiness or dizziness Causes damage to organs
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Isopropyl alcohol (67-63-0)	
LC50 fishes 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [Flow-through])
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	> 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus)
LC50 fish 2	11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [Static])
EC50 other aquatic organisms 2	> 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
Methyl alcohol (67-56-1)	
LC50 fishes 1	> 12700 mg/l 96 hours
EC50 Daphnia 1	> 10000 mg/l 48 hours
Ethyl alcohol (Self Classified) (64-17-5)	
LC50 fishes 1	12,0 - 16,0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 2	10800 mg/l (Exposure time: 24 h - Species: Daphnia magna)

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12.2. Persistence and degradability

Septihol® Ethyl WFI Sterile Alcohol Solution

Persistence and degradability : Not established

12.3. Bioaccumulative potential

Septihol® Ethyl WFI Sterile Alcohol Solution

Bioaccumulative potential : Not established

Isopropyl alcohol (67-63-0)

Log Pow : 0,05 (at 25 °C)

Ethyl alcohol (Self Classified) (64-17-5)

Log Pow : -0,32

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

: Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations

Additional information : Handle empty containers with care because residual vapours are flammable. Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations

Ecology - waste materials : Avoid release to the environment

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No (ADR) : 1170
UN-No.(IATA) : 1170
UN-No. (IMDG) : 1170
UN-No.(ADN) : 1170

14.2. UN proper shipping name

Proper Shipping Name : ETHANOL
Transport document description : UN 1170 ETHANOL SOLUTIONS, 3, II

14.3. Transport hazard class(es)

Class (UN) : 3
Classification code (ADR) : F1
Class (IATA) : 3
Class (IMDG) : 3
Class (ADN) : 3
Hazard labels (UN) : 3



14.4. Packing group

Packing group (UN) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

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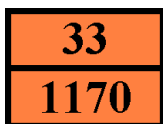
14.6. Special precautions for user

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 33

Classification code (UN) : F1

Orange plates :



Special provision (ADR) : 144, 601

Transport category (ADR) : 2

Tunnel restriction code : D/E

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

EAC code : *2YE

14.6.2. Transport by sea

22 ounce and 32 ounce bottles – UN1170, Ethanol Solutions, 3, PGII, Ltd. Qty.

1 gallon bottle – UN1170, Ethanol Solutions, 3, PGII

14.6.3. Air transport

Not eligible for air transport

14.6.4. Inland waterway transport

22 ounce and 32 ounce bottles – UN1170, Ethanol Solutions, 3, PGII, Ltd. Qty.

1 gallon bottle – UN1170, Ethanol Solutions, 3, PGII

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Révision date : 02/06/2018

Other information : The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed

Full text of H- and EUH-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:vapour)	Acute toxicity (inhalation:vapour), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 1	Specific target organ toxicity (single exposure), Category 1
STOT SE 2	Specific target organ toxicity (single exposure), Category 2
STOT SE 3	Specific target organ toxicity (single exposure), Category 3
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness

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H370	Causes damage to organs
H371	May cause damage to organs

SDS EU (REACH Annex II)

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