

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

1.1. Product identifier

Product form : Mixture
Product name : AHS 70
Product code : 294
Product group : Mixture

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

1.2.1. Relevant identified uses

Main use category : Professional uses
Use of the substance/mixture : Ready to use hydroalcoholic hand disinfection gel

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Clover Chemicals Ltd
Clover House Macclesfield Road
SK23 7DQ Whaley Bridge – Derbyshire
United Kingdom
T 01663 733114 - F 01663 733115
info@cloverchemicals.com - www.cloverchemicals.com

Supplier

Christeyns NV
Afrikalaan 182
9000 GENT
Belgium
T +32 (0)9/ 223 38 71 - F +32 (0)9/ 233 03 44
info@christeyns.be - www.christeyns.com

1.4. Emergency telephone number

| Country | Official advisory body | Address | Emergency number | Comment |
|----------------|--|--|--|--------------------------------------|
| Ireland | National Poisons Information Centre Beaumont Hospital | PO Box 1297 Beaumont Road 9 Dublin | +353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| United Kingdom | National Poisons Information Service (Birmingham Centre) City Hospital | Dudley Road B18 7QH | 0344 892 0111 | Only for healthcare professionals |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 2 H225
Serious eye damage/eye irritation, Category 2 H319
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412
Full text of H- and EUH-statements: 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) :



GHS02

GHS07

CLP Signal word : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H319 - Causes serious eye irritation.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 - Wear eye 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.

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2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

| Component | |
|-------------------------|---|
| tetradecanol (112-72-1) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Ethanol (64-17-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|-----|---|
| Ethanol substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, MK, CH); substance with a Community workplace exposure limit | CAS-no: 64-17-5 Einecs nr: 200-578-6 EG annex nr: 603-002-00-5 REACH-no: 01-2119457610-43 | 72 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 |
| tetradecanol substance with national workplace exposure limit(s) (SI) | CAS-no: 112-72-1 Einecs nr: 204-000-3 REACH-no: 01-2119485910-33 | < 1 | Eye Irrit. 2, H319 Aquatic Chronic 1, H410 |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------|--|
| General advice | : In all cases of doubt, or when symptoms persist, seek medical attention. |
| Inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| Skin contact | : Take off contaminated clothing and wash it before reuse. Wash skin with plenty of water and soap. |
| Eye contact | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Ingestion | : Rinse mouth with water, do not induce vomiting, call a doctor. |

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

| | |
|--------------------------|----------------------------------|
| Acute effects inhalation | : No data available. |
| Acute effects skin | : No data available. |
| Acute effects eyes | : Causes serious eye irritation. |
| Acute effects oral route | : No data available. |

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 : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Use a self-contained breathing apparatus and also a protective suit.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum. Flush residue with large amounts of water.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid contact with eyes. Use explosion-proof equipment. Use only non-sparking tools. Ground/bond container and receiving equipment.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Protect from sunlight. Store at ambient temperature.

Storage temperature : 5 – 30 °C

Material(s) to avoid : strong oxidising agents.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Ethanol (64-17-5) | |
|---|---------------------------------------|
| EU - Indicative Occupational Exposure Limit (IOEL) | |
| IOEL TWA | 1900 mg/m ³ |
| IOEL TWA [ppm] | 1000 ppm |
| IOEL STEL | 9500 mg/m ³ |
| IOEL STEL [ppm] | 5000 ppm |
| Ireland - Occupational Exposure Limits | |
| Local name | Ethanol [Ethyl alcohol] |
| OEL STEL [ppm] | 1000 ppm |
| Regulatory reference | Chemical Agents Code of Practice 2021 |
| United Kingdom - Occupational Exposure Limits | |
| Local name | Ethanol |
| WEL TWA (OEL TWA) [1] | 1920 mg/m ³ |
| WEL TWA (OEL TWA) [2] | 1000 ppm |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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8.1.4. DNEL and PNEC

| tetradecanol (112-72-1) | |
|--|--------------------------|
| DNEL/DMEL (Workers) | |
| Acute - systemic effects, dermal | 125 mg/kg bodyweight/day |
| Acute - systemic effects, inhalation | 220 mg/m ³ |
| Long-term - systemic effects, dermal | 125 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 220 mg/m ³ |
| DNEL/DMEL (General population) | |
| Acute - systemic effects, dermal | 75 mg/kg bodyweight |
| Acute - systemic effects, inhalation | 65 |
| Acute - systemic effects, oral | 75 mg/kg bodyweight |
| Long-term - systemic effects, oral | 75 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 65 mg/m ³ |
| Long-term - systemic effects, dermal | 75 mg/kg bodyweight/day |
| PNEC (Water) | |
| PNEC aqua (freshwater) | 0.00032 mg/l |
| PNEC aqua (marine water) | 0.000032 mg/l |
| PNEC (Sediment) | |
| PNEC sediment (freshwater) | 0.36 mg/kg dwt |
| PNEC sediment (marine water) | 0.036 mg/kg dwt |
| PNEC (Soil) | |
| PNEC soil | 0.28 mg/kg dwt |
| Ethanol (64-17-5) | |
| DNEL/DMEL (Workers) | |
| Acute - local effects, inhalation | 1900 mg/m ³ |
| Long-term - systemic effects, dermal | 343 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 950 mg/m ³ |
| DNEL/DMEL (General population) | |
| Acute - local effects, inhalation | 950 mg/m ³ |
| Long-term - systemic effects, oral | 87 mg/kg bodyweight/day |
| Long-term - systemic effects, inhalation | 114 mg/m ³ |
| Long-term - systemic effects, dermal | 206 mg/kg bodyweight/day |
| PNEC (Water) | |
| PNEC aqua (freshwater) | 0.96 mg/l |
| PNEC aqua (marine water) | 0.79 mg/l |
| PNEC (Sediment) | |
| PNEC sediment (freshwater) | 3.6 mg/kg dwt |
| PNEC sediment (marine water) | 2.9 mg/kg dwt |
| PNEC (Soil) | |
| PNEC soil | 0.63 mg/kg dwt |
| PNEC (Oral) | |
| PNEC oral (secondary poisoning) | 0.72 mg/kg food |
| PNEC (STP) | |
| PNEC sewage treatment plant | 580 mg/l |

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8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

ISO 16321-1. Safety glasses

8.2.2.2. Skin protection

Protective equipment:

Not required

Hand protection:

Not required

8.2.2.3. Respiratory protection

Respiratory protection:

Not required

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-------------------|
| Physical state | : Liquid |
| Colour | : Colourless. |
| Physical state/form | : Viscous liquid. |
| Odour | : Alcohol. |
| Odour threshold | : Not available |
| Melting point/range | : Not available |
| Freezing point | : Not available |
| Boiling point/Boiling range | : > 35 °C |
| Flammability | : Not available |
| Explosive limits | : Not available |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : = 20 °C |
| Autoignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : 7.5 – 8.5 |
| Viscosity, kinematic | : Not available |
| Viscosity, dynamic | : ≈ 2500 cP |
| Solubility | : Water: 100 % |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 0.854 – 0.872 |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

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9.2.2. Other safety characteristics

VOC content : 72 % (VOC Swiss)

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Nitrogen oxides.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

| Ethanol (64-17-5) | |
|---------------------------------|--------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rabbit | > 2000 mg/kg |
| LC50 Inhalation - Rat (Vapours) | > 20 mg/l/4h |

Skin corrosion/irritation : Not classified

pH: 7.5 – 8.5

Serious eye damage/irritation : Causes serious eye irritation.

pH: 7.5 – 8.5

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| Ethanol (64-17-5) | |
|-------------------|----------------------------|
| IARC group | 1 - Carcinogenic to humans |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Harmful to aquatic life with long lasting effects.

| tetradecanol (112-72-1) | |
|-------------------------|-----------------------------|
| NOEC (chronic) | > 0.001 (\leq 0.01) mg/l |

| Ethanol (64-17-5) | |
|-------------------|------------|
| LC50 - Fish [1] | 11200 mg/l |
| ErC50 algae | 275 mg/l |

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12.2. Persistence and degradability

| Ethanol (64-17-5) | |
|---------------------------------|-----------------------------------|
| Biochemical oxygen demand (BOD) | 0.1 g O ₂ /g substance |
| Chemical oxygen demand (COD) | 1.9 g O ₂ /g substance |

12.3. Bioaccumulative potential

| Ethanol (64-17-5) | |
|---|------|
| Partition coefficient n-octanol/water (Log Kow) | -0.3 |

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| Component | |
|-------------------------|---|
| tetradecanol (112-72-1) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Ethanol (64-17-5) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Waste / unused products

HP Code

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Collect all waste in suitable and labelled containers and dispose according to local legislation.

: HP3 - "Flammable:"

– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;

– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;

– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;

– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;

– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;

– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.

HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information




In accordance with ADR / IMDG / IATA

| ADR | IMDG | IATA |
|---|--|--|
| 14.1. UN number or ID number | | |
| UN 1993 | UN 1993 | UN 1993 |
| 14.2. UN proper shipping name | | |
| FLAMMABLE LIQUID, N.O.S. (Ethanol) | FLAMMABLE LIQUID, N.O.S. (Ethanol) | Flammable liquid, n.o.s. (Ethanol) |
| Transport document description | | |
| UN 1993 FLAMMABLE LIQUID, N.O.S. (Ethanol), 3, III, (E) | UN 1993 FLAMMABLE LIQUID, N.O.S. (Ethanol), 3, III | UN 1993 Flammable liquid, n.o.s. (Ethanol), 3, III |
| 14.3. Transport hazard class(es) | | |
| 3 | 3 | 3 |

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| ADR | IMDG | IATA |
|---|---|---|
|  |  |  |
| 14.4. Packing group | | |
| III | III | III |
| 14.5. Environmental hazards | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | |

14.6. Special precautions for user

Overland transport

| | |
|---|--------------|
| Classification code (ADR) | : F1 |
| Special provisions (ADR) | : 274, 601 |
| Limited quantities (ADR) | : 5I |
| Packing instructions (ADR) | : P001, R001 |
| Mixed packing provisions (ADR) | : MP19 |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Operation (ADR) | : S2 |
| Tunnel code | : E |
| EAC code | : •3YE |

Transport by sea

| | |
|---------------------------------|-----------------|
| Special provisions (IMDG) | : 223, 274, 955 |
| Limited quantities (IMDG) | : 5 L |
| Packing instructions (IMDG) | : LP01, P001 |
| IBC packing instructions (IMDG) | : IBC03 |

Air transport

| | |
|--|--------|
| PCA Limited quantities (IATA) | : Y344 |
| PCA limited quantity max net quantity (IATA) | : 10L |
| PCA packing instructions (IATA) | : 355 |
| PCA max net quantity (IATA) | : 60L |
| CAO packing instructions (IATA) | : 366 |
| CAO max net quantity (IATA) | : 220L |
| Special provisions (IATA) | : A3 |

14.7. Maritime transport in bulk according to IMO instruments

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

Other information, restriction and prohibition regulations : Not affected by the conditions of restriction _ ANNEXE XVII.

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

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POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : 72 % (VOC Swiss)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008. This information relates to the specific material designated and may not be valid in combination with other product(s). It is recommended to pass the information of this safety data sheet, eventually in an appropriated form, to the users.

Full text of H- and EUH-statements:

| | |
|-------------------|---|
| Aquatic Chronic 1 | Hazardous to the aquatic environment – Chronic Hazard, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| | | |
|-------------------|------|-----------------------|
| Flam. Liq. 2 | H225 | On basis of test data |
| Eye Irrit. 2 | H319 | Calculation method |
| Aquatic Chronic 3 | H412 | Calculation method |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.