# SAFETY DATA SHEET

## Hand Sanitizer
**FAO FORMULATION : (80% alcohol)**

**Issue Date: 03/06/2020**
**Review Date: 03/06/2025 or When Formulations Change.**
**Version No.1**

**Safety Data Sheet according to WHS and ADG requirements**

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

### Product Identifier

| | |
|---|---|
| **Product Name** | Medical Grade Hand Sanitizer |
| **Proper Shipping Name** | ETHANOL (ETHYL ALCOHOL) or ETHONAL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| **Other means of identification** | |

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

| | |
|---|---|
| **Relevant identified uses** | Hand Sanitizing for good personal hygiene and or Spray & Wiping down touch contact surfaces including use in sanitizing food preparation table surfaces. |

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

| | |
|---|---|
| **Registered company name** | SHERPA OPERATIONAL EXCELLENCE |
| **Address** | 4/96 Garden Drive, Willawong, QLD 4110. AUSTRALIA. |
| **Telephone** | 0428196211 |
| **Fax** | Not available |
| **Website** | www.oesherpa.com |
| **Email** | info@oesherpa.com |

### Emergency telephone number

| | |
|---|---|
| **Association / Organisation** | Poisons Information Line |
| **Emergency telephone numbers** | 13 11 25 |
| **Other emergency telephone numbers** | Not available |

## SECTION 2 HAZARDOUS IDENTIFICATION

| | |
|---|---|
| Classification of the substance or Mixture | **HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.** |
| Poisons Schedule | 5 |
| Classification | Flammable Liquid Category 2 |
| GHS Label Element |  |
| Signal Word | **DANGER** |

### Hazard statement(s)

| | |
|---|---|
| H225 | Highly flammable liquid and vapor. |
| H319 | Causes serious eye irritation |

### Precautionary statement(s) Prevention

| | |
|---|---|
| P210 | Keep away from heat/open flames/hot surface. – No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment. |
| P242 | Only use non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

### Precautionary statement(s) Response

| | |
|---|---|
| P370+P378 | In case of fire: Use alcohol resistant foam or normal foam for extinction. |
| P305+P351+P388 | 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. |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |

### Precautionary statement(s) Storage

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

### Precautionary statement(s) Disposal

| | |
|---|---|
| P501 | Dispose of contents/container in accordance with local regulations |

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Substances

See section below for composition of Mixtures.

### Mixtures

| CAS No | %[Volume] | Name |
|---|---|---|
| 64-17-5 | 80 | ethanol |
| | balance | Ingredients determined not to be hazardous |

## SECTION 4 FIRST AID MEASURES

### MEASURES Description of first Aid

| | |
|---|---|
| **Eye Contact** | If this product comes in contact with the eyes:<br>· Wash out immediately with fresh running water.<br>· Ensure complete irrigation of the eye by keeping eyelids apart and away from the eye and moving the eyelids by occasionally lifting the upper and lower lids.<br>· Seek medical attention without delay. If pain persists or recurs seek medical attention.<br>· Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| **Skin Contact** | Wipe off excess with absorbent issue or towel.<br>Seek medical attention if swelling/redness/blistering or irritation occurs. |
| **Inhalation** | If fumes or combustion products are inhaled:<br>· Remove from contaminated area.<br>· Lay patient down. Keep warm and rested.<br>· Prostheses such as false teeth, which may block the airway should be removed, where possible, prior to initiating first aid procedures.<br>· Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.<br>· Transport to hospital, or doctor. |
| **Ingestion** | · Immediately give a glass of water.<br>· First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

For acute short term repeated exposure to ethanol:

- Acute ingestion in non-tolerant patients usually responds to supportive care with special attention to prevention of aspiration, replacement of fluid and correction of nutritional deficiencies (magnesium, thiamine pyridoxine, Vitamins C and K).
- Give 50% dextrose (50-100ml) IV to obtunded patients following blood draw for glucose determination.
- Comatose patients should be treated with initial attention to airway, breathing, circulation and drugs of immediate importance (glucose, thiamine).
- Decontamination is probably unnecessary more than 1 hour after a single observed ingestion. Cathartics and charcoal may be given but are probably not effective in single ingestions.
- Fructose administration is contra-indicated due to side effects.

## SECTION 5 FIREFIGHTING MEASURES

**Extinguishing media:**

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit)
- Carbon dioxide.
- Water spray or fog – Large fires only.

**Special hazards arising from the substance or mixture**

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|---|---|
| **Fire Incompatibility** | • Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorines etc. as ignition may result. |

**Advice for firefighters**

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|---|---|
| **Fire Fighting** | · Alert Fire Brigade and tell them location and nature of hazard.<br>· May be violently or explosively reactive.<br>· Wear breathing apparatus plus protective gloves in the event of a fire.<br>· Prevent, by any means available, spillage from entering drains or water course.<br>· Consider evacuation (or protect in place).<br>· Fight fire from a safe distance, with adequate cover.<br>· If safe, switch off electrical equipment until vapor fire hazard removed.<br>· Use water delivered as a fire spray to control the fire and cool adjacent area. |
| **Fire/Explosion Hazard** | · Liquid and vapor are highly flammable.<br>· Severe fire hazard when exposed to heat, flame and/or oxidizers.<br>· Vapor may travel a considerable distance to source of ignition.<br>· Heating may cause expansion or decomposition leading to violent rupture of containers.<br>· On combustion, may emit toxic fumes of carbon monoxide (CO).<br>Combustion product include:<br>Carbon dioxide ($CO_2$)<br>Other pyrolysis products typical of burning organic material. |
| **HAZCHEM** | 2YE |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

See section 8

**Environmental precautions**

See section 12

**Methods and material for containment and cleaning up**

| | |
|---|---|
| **Minor Spills** | · Remove all ignition sources.<br>· Clean up spills immediately.<br>· Avoid breathing vapors and contact with skin and eyes.<br>· Control personal contact with the substance, by using protective equipment.<br>· Contain and absorb small quantities with vermiculite or other absorbent material.<br>· Wipe up.<br>· Collect residues in a flammable waste container. |
| **Major Spills** | · Clear are of personnel and move upwind.<br>· Alert Fire Brigade and tell them location and nature of hazard.<br>· May be violently or explosively reactive.<br>· Wear breathing apparatus plus protective gloves.<br>· Prevent, by any means available, spillage from entering drains or water course.<br>· Consider evacuation (or protect in place).<br>· No smoking, naked lights or ignition sources. |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

**Precautions for safe handling**

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|---|---|
| **Safe Handling** | · Containers, even those that have been emptied, may contain explosive vapors.<br>· Do NOT cut, drill, grind, weld or perform similar operation on or near containers.<br>· Avoid all personal contact, including inhalation.<br>· Wear protective clothing when at risk of overexposure occurs.<br>· Use in well ventilated area.<br>· Prevent concentration in hollows or sumps.<br>· DO NOT enter confined spaces until atmosphere has been checked.<br>· No smoking, naked lights, heat or ignition sources.<br>· Do not generate static electricity.<br>· DO NOT use plastic buckets. |
| **Other information** | · Store in original containers in approved flame-proof area.<br>· No smoking, naked lights, heat or ignition sources.<br>· DO NOT store in pits, depressions, basements or areas where vapors may be trapped.<br>· Keep containers securely sealed.<br>· Store away from incompatible materials in a cool, dry well ventilated area.<br>· Protect containers against physical damage and check regularly for leaks. |

**Conditions for safe storage, including any incompatibilities**

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|---|---|
| **Suitable container** | · Packing as supplied by manufacturer.<br>· Plastic containers may only be used if approved for flammable liquid.<br>· Check that containers are clearly labelled and free from leaks. |
| **Storage incompatibility** | · Avoid oxidizing agents, acids, acid chlorides, acid anhydrides, chloroformates. |

## SECTION 8 EXPOSURE CONTROLS / PERONAL PROTECTION

**Control parameters**

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|---|---|---|---|---|---|
| Australia Exposure Standards | ethanol | Ethyl alcohol | 1880 mglm3 / 1000 ppm | Not available | Not available | Not available |

EMERGEWNCY LIMITS

| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|---|---|---|---|---|
| ethanol | Ethyl alcohol | Not available | Not available | Not available |

| Ingredient | Original IDLH | Revised IDLH |
|---|---|---|
| ethanol | 3,300 [LEL] ppm | Not available |

**Exposure controls**

| | |
|---|---|
| **Appropriate engineering controls** | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.<br>The basic types of engineering controls are:<br>· Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>· Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the process and chemical or contaminant in use.<br>· Employers may need to use multiple types of controls to prevent employee overexposure.<br><br>For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. |
| **Personal protection** |  |

| | |
|---|---|
| **Eye and face protection** | No special equipment for minor exposure i.e. when handling small quantities.<br>OTHERWISE:<br>· Safety glasses with side shields.<br>· Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. |
| **Skin protection** | See Hand protection below |
| **Hands/feet protection** | · Bare skin is cleaned with this material.<br>· Application of hand cream / barrier cream after use is recommended. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of glove type is dependent on usage. |
| **Body protection** | See Other protection below |
| **Other protection** | · Bare skin is cleaned with this material.<br>· Application of hand cream / barrier cream after use is recommended. |
| **Thermal hazards** | Not Available |

**Respiratory protection**

**Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)**
Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

| Required minimum protection factor | Half-face Respirator | Full-Face Respirator |
|---|---|---|
| up to 10 | AK-AUS / Class1 P2 | |
| up to 50 | | AK-AUS / Class 1 P2 |
| up to 50 | Airline * | |
| up to 100 | | AK-2 P2 |
| up to 100 | | AK-3 P2 |
| 100+ | | Airline * |

* - Continuous Flow ** - Continuous-flow or positive pressure demand
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

**Cartridge respirators should never be used for emergency ingress or in areas of unknown vapor concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odors through the respirator. The odor may indicate that the mask is not functioning properly, that the vapor concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.**

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Appearance** Transparent highly flammable liquid with a characteristic odor; mixes with water.

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | **Relative density (Water = 1)** | 0.79 @ 20 C |
| **Odour** | Not Available | **Partition coefficient n-octanol / water** | Not Available |
| **Odour threshold** | Not Available | **Auto-ignition temperature (°C)** | 363 |
| **pH (as supplied)** | Not Available | **Decomposition temperature** | Not Available |
| **Melting point / freezing point (°C)** | Not Available | **Viscosity (cSt)** | Not Available |
| **Initial boiling point and boiling range (°C)** | Not Available | **Molecular weight (g/mol)** | Not Available |
| **Flash point (°C)** | 16 (CC) | **Taste** | Not Available |
| **Evaporation rate** | Not Available | **Explosive properties** | Not Available |
| **Flammability** | HIGHLY FLAMMABLE. | **Oxidising properties** | Not Available |
| **Upper Explosive Limit (%)** | Not Available | **Surface Tension (dyn/cm or mN/m)** | Not Available |
| **Lower Explosive Limit (%)** | Not Available | **Volatile Component (%vol)** | Not Available |
| **Vapour pressure (kPa)** | Not Available | **Gas group** | Not Available |
| **Solubility in water (g/L)** | Miscible | **pH as a solution (1%)** | Not Available |
| **Vapour density (Air = 1)** | Not Available | **VOC g/L** | Not Available |

## SECTION 10 STABILITY AND REACTIVITY

| | |
|---|---|
| **Reactivity** | See section 7 |
| **Chemical stability** | · Unstable in the presence of incompatible materials.<br>· Product is considered stable.<br>· Hazardous polymerisation will not occur. |
| **Possibility of hazardous reactions** | See section 7 |
| **Conditions to avoid** | See section 7 |
| **Incompatible materials** | See section 7 |
| **Hazardous decomposition products** | See section 5 |

## SECTION 11 TOXICOLOGICAL INFORMATION

**Information on toxicological effects**

| | |
|---|---|
| **Inhaled** | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).<br>Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.<br>Inhalation of high concentrations of gas/vapor causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. |
| **Ingestion** | The material has **NOT** been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. |
| **Skin Contact** | The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models).<br>Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Not considered an irritant through normal use. |
| **Eye** | There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. |
| **Chronic** | Principal hazards are accidental eye contact and cleaner overuse. Overuse or obsessive cleaner use may lead to defatting of the skin and may cause irritation, drying, cracking, leading to dermatitis. |

| | TOXICITY | IRRITATION |
|---|---|---|
| **Ethanol** | Dermal (rabbit) LD50: 17100 mg/kg[1] | Eye (rabbit): 500 mg SEVERE |
| | Inhalation (rat) LC50: 63926.976 mg/l/4h[2] | Eye (rabbit):100mg/24hr-moderate |
| | Oral (rat) LD50: 7060 mg/kg[2] | Skin (rabbit):20 mg/24hr-moderate |
| | | Skin (rabbit):400 mg (open)-mild |
| **Legend:** | 1. Value obtained from Europe ECHA Registered Substances. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances | |

**ETHANOL** The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

| | | | |
|---|---|---|---|
| **Acute Toxicity** | ✗ | **Carcinogenicity** | ⃠ |
| **Skin Irritation/Corrosion** | ⃠ | **Reproductivity** | ⃠ |
| **Serious Eye Damage/Irritation** | ✓ | **STOT - Single Exposure** | ⃠ |
| **Respiratory or Skin sensitization** | ⃠ | **STOT - Repeated Exposure** | ⃠ |
| **Mutagenicity** | ⃠ | **Aspiration Hazard** | ⃠ |

***Legend:***

✗ *– Data available but does not fill the criteria for classification*

✓ *– Data required to make classification available*

⃠ *– Data Not Available to make classification*

## SECTION 12 ECOLOGICAL INFORMATION

**Toxicity**

When ethanol is released into the soil it readily and quickly biodegrades but may leach into ground water; most is lost by evaporation. When released into
water the material readily evaporates and is
biodegradable. Ethanol does not bioaccumulate to an
appreciable extent.
The material is readily degraded by reaction with photochemically produced hydroxy radicals; release into air will result in photodegradation and wet deposition.

**DO NOT** discharge into sewer or waterways.

## SECTION 13 DISPOSAL CONSIDERATIONS

**Waste treatment methods**

| | |
|---|---|
| **Product / Packaging disposal** | Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.<br>A Hierarchy of Controls seems to be common - the user should investigate:<br>• Reduction<br>• Reuse<br>• Recycling<br>• Disposal (if all else fails)<br><br>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.<br>Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.<br>• DO NOT allow wash water from cleaning or process equipment to enter drains.<br>• It may be necessary to collect all wash water for treatment before disposal.<br>• In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.<br>• Where in doubt contact the responsible authority.<br>• Recycle wherever possible.<br>• Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.<br>• Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or<br>• Incineration in a licensed apparatus (after admixture with suitable combustible material).<br>• Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed. |

## SECTION 14 TRANSPORT INFORMATION

| | |
|---|---|
| **Labels Required** |  |
| **Marine Pollutant** | No |

**Land transport (ADG)**

| | |
|---|---|
| **UN number** | 1170 |
| **UN proper shipping name** | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| **Transport hazard class(es)** | Class 3<br>Subrisk Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |

**Air Transport (ICAO-IATA / DGR)**

| | |
|---|---|
| **UN number** | 1170 |
| **UN proper shipping name** | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| **Transport hazard class(es)** | ICAO/IATA Class 3<br>ICAO/IATA Subrisk Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |

**Sea transport (IMDG-Code / GGVSee)**

| | |
|---|---|
| **UN number** | 1170 |
| **UN proper shipping name** | ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) |
| **Transport hazard class(es)** | IMDG Class 3<br>IMDG Subrisk Not Applicable |
| **Packing group** | II |
| **Environmental hazard** | Not Applicable |

## SECTION 15 REGULATORY INFORMATION

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

**ETHANOL (64-17-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

## SECTION 16 OTHER INFORMATION

**Other information**

| | |
|---|---|
| **Revision Date** | 03/06/2025 |
| **Initial Date** | 03/06/2020 |

Classification of the preparation and its individual components has drawn on official and authoritative sources.
The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.