



CleanedUp

HAND SANITISER

**80% ALCOHOL
CONTENT**

ANTI-VIRAL, ANTI-BACTERIAL

W.H.O. RECOMMENDED FORMULATION

COMPOSITION:
80% Ethanol, 1.91% Hydroxypropyl Betaine, 0.09% Fragrance essential, Deionised Water

DIRECTIONS:
Apply a palmful of product between hands to wet and cover all surfaces of the hand.
Rub for 20 seconds.

WARNINGS:
For external use only. Do not ingest. Avoid contact with eyes.
Keep out of reach of children. For information on first aid, see the back of the label.



SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE SUPPLIER**1.1 Product identifiers:**

Product form: Mixture
 Product name: HAND SANITISER – TSDA 1
 Product codes: HSd001d – HSd020d [Various quantities/packs]
 Type of product: Biocide

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

Recommended use: Hand Sanitiser
 Restrictions on use: For industrial, professional, retail, and personal use.
 Uses advised against: Not to be used on infants less than 3 months.
 Use by children under 6 years must be supervised.
 Product dilution information: Product is sold ready to use

1.3 Details of the supplier of the safety data sheet.

Supplier: CambCol Ltd., Unit 18, Oak Lane Business Park,
 Littleport,
 Cambridgeshire, CB6 1RS
 +44 (0)1353 860124
 +44 7713 591925

1.4 Emergency telephone number.**SECTION 2. HAZARDS IDENTIFICATION****2.1 GHS/CLP/Reach Classification of the substance or mixture.**

Flammable liquids: **Category 2**
 Eye irritation: **Category 2A**

2.2 GHS/CLP label elements.

Hazard pictograms (CLP):



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.
 P233 Keep container tightly closed.
 P240 [1000L supply] Ground/bond container and receiving equipment.
 P241 [1000L supply] Use explosion proof electrical/ventilation/lighting Equipment
 P242 Use only non-sparking tools
 P243 Take precautionary measures against static discharge
 P370+P378 In case of fire: Use media other than water to extinguish
 P403+P235 Store in a well-ventilated place, keep cool.
 P510 Dispose of contents/container to an approved waste disposal plant.

Response: 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.
 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

2.3 Other hazards. If swallowed, material may be irritating to the mucous membranes and upper respiratory tract. Wash out mouth with water.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances. Not applicable

3.2 Mixtures.

Chemical Name	CAS-No.	Concentration (%)	Hazard Classifications at listed concentration	Function
Ethanol	64-17-5	80 - 85%	H225, H319	Sanitiser
Glycerin/Glycerol	56-81-5	1.4 - 1.5%	-	Emollient
Hydrogen peroxide	7722-84-1	0.12 - 0.13%	-	Steriliser
tert-Butyl alcohol	75-65-0	0.1%	-	Denaturant
Denatonium Benzoate	3734-33-6	0.001% w/v	-	Bitterant
Sterile Water	7732-18-5	Remainder	-	Diluent

Tert-butyl alcohol and Denatonium Benzoate are added to denature the alcohol under Trade-specific denatured alcohol protocol 1 [TSDA 1], specified for hand sanitisers.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures.

In case of eye contact: Remove contact lenses if present and easy to do. Rinse with water
 If ingested: Rinse mouth. Do NOT induce vomiting.
 If inhaled: Remove victim to fresh air and keep in a position comfortable for breathing.
 Protection of first-aiders: No special precautions are necessary for first aid responders.

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

Symptoms/effects after ingestion: May cause damage to organs. Get medical attention if you feel unwell.
 Symptoms/effects after eye contact: May cause slight irritation.

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

Notes to physician: Treat symptomatically. See toxicological information (Section 11)

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media.

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry Powder. Carbon dioxide. Sand.
 Unsuitable extinguishing media: High volume water jet

5.2 Special hazards during fire-fighting.

Fire hazard: Highly flammable liquid and vapour.
 Flash back possible over considerable distance.
 Explosion hazard: May form flammable/explosive vapour-air mixture
 Vapours can accumulate in low areas.
 Hazardous combustion products: Carbon oxides

5.3 Advice for firefighters.

Protection during firefighting: Do not enter fire area without proper protective equipment.
 Use respiratory protection.
 Firefighting instructions: Use water spray/fog to cool unopened containers.
 Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures.**

General measures: Remove all sources of ignition. No open flames. No smoking.
 Emergency procedures: Evacuate unnecessary personnel, ventilate area.
 For emergency responders: Ensure clean-up is conducted by trained personnel with proper protection.

6.2 Environmental precautions.

Prevent entry to sewers, public water, soil, surface or ground water. Notify authorities if liquid enters sewers or public waters. Prevent further leakage or spillage if safe to do so.

6.3 Methods and materials for containment and cleaning up.

Stop leak if safe to do so. Contain spillage.
 Collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Store away from other materials.
 For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE**7.1 Precautions for safe handling.**

Avoid static electricity discharge, which might ignite organic vapours. Use non-sparking tools. No open flames, No smoking. Keep away from heated surfaces. Provide good ventilation in process area to prevent formation of vapour.

7.2 Conditions for safe storage:

Storage conditions: Keep in tightly closed original container in a cool, well ventilated, fireproof place.
 Keep away from heat, sources of ignition, direct sunlight, temperature exceeding 50°C / 112°F, and oxidizing agents. If a container over 20L, ground/bund container and receiving equipment to contain spills and avoid static electricity.
 Incompatible products: Strong bases, Strong acids, Strong oxidising agents.
 Access: Keep out of the reach of children.
 Storage temperature: 0 °C to 35 °C recommended.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Ingredients with workplace control parameters**

Ingredient	CAS-No.	Form of exposure	Permissible concentration	Authority
Ethanol	64-17-5	TWA	1,000 ppm	ACGIH
		TWA	1,000 ppm or 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm or 1,900 mg/m ³	OSHA Z1
		TWA	1,000 ppm or 1,920 mg/m ³	EH40
Tert-Butyl Alcohol	75-65-0	TWA	100ppm	ACGIH
		TWA	100ppm or 300 mg/m ³	OSHA PEL
		TWA	100ppm or 300 mg/m ³	NIOSH REL
		TWA	100ppm or 208 mg/m ³	EH40
		STEL	150ppm or 462 mg/m ³ 15min	EH40

8.2 Exposure controls [for mixture]

Engineering controls: Not required for normal conditions of use.
 Eye protection: Not required for normal conditions of use.
 Hand protection: Not required for normal conditions of use.
 Skin/Body protection: Not required for normal conditions of use.
 Respiratory protection: Not required for normal conditions of use.
 Hygiene measures: No specific measures identified.
 Other information: Do not breathe vapours. Do not eat, drink or smoke when using this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	: liquid
Colour	: Colourless
Odour	: alcoholic
Odour Threshold	: no data available
pH	: 5.5 - 8.5
Melting point/freezing point	: no data available
Initial boiling point and boiling range	: 78-100°C
Evaporation rate	: no data available
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: 5.7 KPa
Relative vapour density @ 20°C	: 1.59
Relative density for mixture	: 0.86 - 0.87
Water solubility	: Fully miscible
Solubility in other solvents	: no data available
Partition coefficient for Ethanol	: octanol/water: 0.52
100% Flash point for mixture	: 17.5 °C closed cup
Autoignition temperature for Ethanol	: 363°C
Viscosity, kinematic	: no data available
Viscosity, dynamic	: 1.2cP
Explosive properties	: no data available
Oxidizing properties	: no data available
Molecular weight	: mixture
Volatile Organic Compounds (VOC)	: no data available, will include ethanol.

9.2 Other information No additional information available.

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity	No additional information available.
10.2 Chemical stability	Highly flammable liquid and vapour. Otherwise stable.
10.3 Possibility of hazardous reactions	No dangerous reactions under conditions of normal use.
10.4 Conditions to avoid	Heat, flames and sparks. Direct sunlight
10.5 Incompatible materials	Strong acids. Strong bases, Strong oxidising agents.
10.6 Hazardous decomposition products	Carbon oxides, may release flammable gases

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Likely routes of exposure	Inhalation, Eye contact, Skin contact
Potential Health Effects	
Eyes:	Causes serious eye irritation. Vapours from heating may cause irritation.
Skin:	Health injuries are not known or expected under normal use.
Ingestion:	Health injuries are not known or expected under normal use.
Inhalation:	Health injuries are not known or expected under normal use.
Chronic Exposure:	Health injuries are not known or expected under normal use

Experience with human exposure

Eye contact:	Redness, Pain, Irritation
Skin contact:	No symptoms known or expected.
Ingestion:	No symptoms known or expected.
Inhalation:	No symptoms known or expected.

Toxicity

Acute oral toxicity	Acute toxicity estimate: > 5,000 mg/kg [ethanol]
Acute inhalation toxicity	no data available
Acute dermal toxicity	No toxicity observed.
Skin corrosion/irritation	Very rare, even when used multiple times a day.
Serious eye damage/irritation	no data available
Respiratory/skin sensitization	Extremely rare.

Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive effects:	no data available
Germ cell mutagenicity:	no data available
Teratogenicity:	no data available
STOT-single exposure:	The mixture is not classified as specific target organ toxicant, single exposure
STOT-repeated exposure:	no data available
Aspiration toxicity:	no data available

Ingredients:

Ethanol	Acute inhalation toxicity:	LC50 rat:	115-125 mg/l /4h
	Acute oral toxicity	LD50 rat:	10470 mg/Kg
	Acute dermal toxicity:	LD50 rat:	15,800 mg/Kg
tert-Butyl alcohol	Acute inhalation toxicity:	LC50 rat:	>10000ppm /4h
	Acute oral toxicity	LD50 rat:	2200 mg/Kg
	Acute dermal toxicity:	LD50 rabbit:	> 2g/Kg
Denatonium Benzoate	Acute oral toxicity	LD50 rat:	584 mg/Kg
	Acute dermal toxicity:	LD50 rabbit:	> 2g/Kg

SECTION 12. ECOLOGICAL INFORMATION**12.1 Ecotoxicity**

Overall Environmental Effects : Harmful to aquatic life.

Product : no data available

Ingredients:

Ethanol toxicity to fish	: Fish (general)	LC50 = 11,000 mg/l/96hr
	: Fathead minnow,	LC50 = 14200 mg/l/96h
	: Water flea,	EC50 = 9268 mg/l/48h
	: Freshwater algae	EC50 = 275 mg/l/72h
	: Photobacterium phosphoreum	EC50 = 34634 mg/l/30min
Tert-butyl alcohol toxicity to fish	: Fathead minnow	LC50 = 6130-6700 mg/l/96hr
	: Daphnia magna	EC50 = 933 mg/l/48hr

12.2 Persistence and degradability : The mixture is biodegradable. Unlikely to persist.

- 12.3 Bio-accumulative potential** : The mixture is biodegradable. Unlikely to persist.
- 12.4 Mobility in soil** : The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in air
- 12.5 Results of PBT v PVB assessment** : No additional information available.
- 12.6 Other adverse effects** : Avoid release to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible, recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. All disposal handling methods need to be done in an appropriate manner as for a highly flammable product.
- Additional information. : Handle empty containers with care because residual vapours are flammable. Returned empty containers may be cleaned and used for the same product.

RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste: D001 (Ignitable)

UK Environment agency – Waste classification HP 3 – Flammable liquid class 2. H225.

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labelling, and markings are in compliance with the selected mode of transport.

- Land transport : (ADR, DOT, UK Gov HSE DVSA)
- Sea transport : (IMDG/IMO, UK Gov, Maritime and coastguard agency)

- 14.1 UN number** : UN1170
- 14.2 UN proper shipping name** : Ethanol solution [Hand sanitiser]
- 14.3 UN Transport hazard class** : 3
: Hazard Labels



- 14.4 Packing group** : II
- 14.5 Environmental hazards** : no Marine pollutant : no
- 14.6 Special precautions for user** : no special precautions required
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** : Not applicable

SECTION 15. REGULATORY INFORMATION

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

Hazardous Component Inventories listed

Ethanol EINECS (200-578-6), TCSA, DSL, PICCS, ENCS, IECSC, AICS, KECL (KE-13217)

Tert-butyl alcohol EINECS (200-889-7), TCSA, DSL, PICCS, ENCS, IECSC, AICS, KECL (KE-24895)

Denatonium Benzoate EINECS (223-095-2), TCSA, DSL, PICCS, ENCS, IECSC, AICS, KECL (KE-11775)

- National regulations Germany water classification : WGK1 (ethanol & tert-butyl alcohol)
- France INRS Tables of occupational diseases : RG84 (ethanol & tert-butyl alcohol)
- UK – Control of substances Hazardous to health

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH annex XIV substances.
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted
CERCLA Reportable Quantity This material does not contain any components with a CERCLA RQ.
SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ.
SARA 311/312 Hazards : Fire Hazard Acute Health Hazard
SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SECTION 16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

SECTION 17. LEGEND

CAS - Chemical Abstracts Service
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit
TWA - Time Weighted Average
ACGIH - American Conference of Governmental Industrial Hygienists
IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level
PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment
LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%
EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration
POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative,
Toxic vPvB - very Persistent, very Bioaccumulative
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code
MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and Development
ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor