

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
Date of issue: 08.04.2020 Version: 1.0

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

1.1. Product identifier

Product name : SHA-ETOH
Hydroalcoholic solution - World Health Organization - recommended handrub formulation
Product form : Mixture

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Hand sanitizers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

PCAS

21 chemin de la Sauvegarde

69130 ECULLY - FRANCE

T +33 (0)4 26 99 18 00 - F +33 (0)4 26 99 18 38

segens.fds@segens.com

1.4. Emergency telephone number

Emergency number : CARECHEM
+44 1235 239670

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

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP)



GHS02

GHS07

Signal word (CLP)

: Danger

Hazard statements (CLP)

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

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapours.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTRE or doctor if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

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 96 %	(CAS Number) 64-17-5 (EC Number) 200-578-6 (EC Index-No.) 603-002-00-5	83,3	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Hydrogen peroxide solution 3 % (Note B)	(CAS Number) 7722-84-1 (EC Number) 231-765-0 (EC Index-No.) 008-003-00-9	4,17	Not classified
Glycerol	(CAS Number) 56-81-5 (EC Number) 200-289-5	1,45	Not classified
Water	(CAS Number) 7732-18-5 (EC Number) 231-791-2	q.s. 100%	Not classified

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Hydrogen peroxide	(CAS Number) 7722-84-1 (EC Number) 231-765-0 (EC Index-No.) 008-003-00-9	(5 =<C < 8) Eye Irrit. 2, H319 (8 =<C < 50) Eye Dam. 1, H318 (35 =<C < 50) Skin Irrit. 2, H315 (35 =<C < 100) STOT SE 3, H335 (50 =<C < 70) Ox. Liq. 2, H272 (50 =<C < 70) Skin Corr. 1B, H314 (70 =<C < 100) Ox. Liq. 1, H271 (70 =<C < 100) Skin Corr. 1A, H314

Note B : Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. Allow the victim to rest. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Alcohol resistant foam. Carbon dioxide (CO2). Dry powder.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Highly flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible.
Explosion hazard	: Vapours may form explosive mixture with air.

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO₂).

5.3. Advice for firefighters

Precautionary measures fire : Evacuate the danger area. Avoid ignition sources.

Firefighting instructions : Fight fire from safe distance and protected location. Do not breathe fumes from fires or vapours from decomposition. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Wear fire/flammable resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Caution : this product can cause the floor to be slippery.

6.1.1. For non-emergency personnel

Emergency procedures : No flames, no sparks. Eliminate all sources of ignition. Avoid contact with eyes. Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Equip cleanup crew with proper protection. Concerning personal protective equipment to use, see section 8.

Emergency procedures : Ventilate area. Remove all sources of ignition.

6.2. Environmental precautions

Dispose of at a licensed waste collection centre. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain the spilled material by bunding. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Methods for cleaning up : Wash non-recoverable remainder with large amounts of water.

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

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". Disposal considerations. See Heading 13.

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 : Avoid contact with eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. Avoid static electricity discharges. Proper grounding procedures to avoid static electricity should be followed. Remove all sources of ignition. Use only non-sparking tools.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation to minimize vapour concentrations. Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container closed when not in use. Protect from sunlight.

Incompatible materials : Strong oxidizing agents.

Storage temperature : 15 - 25 °C

Heat and ignition sources : Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition.

Special rules on packaging : Store in tightly closed containers. Store in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Hand protection:

Not required for normal conditions of use. Prolonged and/or repeated handling: Protective gloves

Eye protection:

Not required for normal conditions of use. Prolonged and/or repeated handling: Safety glasses

Skin and body protection:

Not required for normal conditions of use

Respiratory protection:

If the ventilation is suitable, it is not essential to wear respiratory equipment

Other information:

Emergency safety showers should be available in the immediate vicinity of any potential exposure. Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Alcohol.
Odour threshold	: No data available
pH	: 6
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 78 °C
Flash point	: 13 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0,859
Density	: 0,859 g/cm ³
Solubility	: Soluble in water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Vapours may form explosive mixture with air.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk, under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Highly flammable liquid and vapour. The vapours are denser than air and may travel along the ground. Distance ignition possible.

10.4. Conditions to avoid

Heat or source of heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Ethanol; ethyl alcohol (64-17-5)

LD50 oral rat	5 - 20 g/kg (INRS)
LD50 dermal rabbit	> 20 g/kg
LC50 inhalation rat (mg/l)	20000 - 30000 ppm

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 6
Serious eye damage/irritation	: Causes serious eye irritation. pH: 6
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

Ethanol; ethyl alcohol (64-17-5)

IARC group	1 - Carcinogenic to humans
------------	----------------------------

Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of this material and its container at hazardous or special waste collection point. Do not empty into drains.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Do not discharge the product into the environment.

SECTION 14: Transport information

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






ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 1170	UN 1170	UN 1170	UN 1170	UN 1170

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

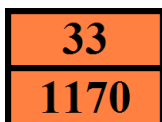
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

14.2. UN proper shipping name				
ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	Ethanol solution	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Transport document description				
UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II, (D/E)	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 Ethanol solution, 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II	UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
II	II	II	II	II
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : 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)	: 144, 601
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 2
Special provisions for carriage - Operation (ADR)	: S2, S20
Hazard identification number (Kemler No.)	: 33
Orange plates	:



Tunnel restriction code (ADR)	: D/E
EAC code	: •2YE

Transport by sea

Special provisions (IMDG)	: 144
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.

Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3, A58, A180
ERG code (IATA)	: 3L

Inland waterway transport

Classification code (ADN)	: F1
Special provisions (ADN)	: 144, 601
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: F1
Special provisions (RID)	: 144, 601
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

14.7. Transport in bulk according to Annex II of Marpol 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

Contains no REACH substances with Annex XVII restrictions
Contains no REACH Annex XIV candidate substance
Contains no REACH Annex XIV substances

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

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

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
LC50	Median lethal concentration
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H225	Highly flammable liquid and vapour.
H271	May cause fire or explosion; strong oxidiser.
H272	May intensify fire; oxidiser.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

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
--------------	------	-----------------------

SHA-ETOH

Hydroalcoholic solution - World Health Organization - recommended handrub formulation

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Eye Irrit. 2	H319	Calculation method
--------------	------	--------------------

SDS EU (REACH Annex II) - SEQENS

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.