

SAFETY DATA SHEET (REGULATION (EC) n° 1907/2006 - REACH) BM GROUP INTERNATIONAL APS

Version 1.1 (24/03/2020) - Page 1/9

HANDSANITIZER 80% (ALC.) - 104

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

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

1.1. Product identifier

Product name: HANDSANITIZER 80% (ALC.)

Product code: TH1001 (500ml), TH1005 (250ml), TH1010 (5L)

PR-number:

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

Hand disinfectant

1.3. Details of the supplier of the safety data sheet

Registered company name: BM GROUP INTERNATIONAL APS

Address: Marielundvej 48D, 2730 Herlev, Denmark. Telephone: +45 4346 2010 info@tuffhand.com

1.4. Emergency telephone number : .

Association/Organisation:.

Other emergency numbers

+45 4817 6970: Monday to Thursday 08:00-16:00; Friday 08:00-15:30

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Flammable liquid, Category 2 (Flam. Liq. 2, H225).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:





GHS02

GHS07

Signal Word : DANGER

Product identifiers:

EC 200-661-7 PROPAN-2-OL

Hazard statements :

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Precautionary statements - General :

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Precautionary statements - Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Precautionary statements - Response :

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.

Precautionary statements - Disposal :

P501 Dispose of contents/container in accordance with local regulation

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

| Identification | (EC) 1272/2008 | Note | % |
|------------------------------|--------------------|------|-----------------|
| INDEX: 603_117_00_0 | GHS07, GHS02 | [1] | 50 <= x % < 100 |
| CAS: 67-63-0 | Dgr | | |
| EC: 200-661-7 | Flam. Liq. 2, H225 | | |
| REACH: 01-2119457558-25-XXXX | Eye Irrit. 2, H319 | | |
| | STOT SE 3, H336 | | |
| PROPAN-2-OL | | | |
| INDEX: 0339 | | [1] | 2.5 <= x % < 10 |
| CAS: 56-81-5 | | | |
| EC: 200-289-5 | | | |
| | | | |
| GLYCEROL | | | |
| INDEX: 603_002_00_5 | GHS07, GHS02 | [1] | 0 <= x % < 2.5 |
| CAS: 64-17-5 | Dgr | | |
| EC: 200-578-6 | Flam. Liq. 2, H225 | | |
| REACH: 01-2119457610-43-XXXX | Eye Irrit. 2, H319 | | |
| | | | |
| ETHANOL | | | |

(Full text of H-phrases: see section 16)

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4: FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

In the event of splashes or contact with eyes :

Remove contact-lenses.

Flush eyes with plenty of water (20-30°C) and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a physician, if pain persists.

In the event of swallowing:

Seek medical attention, showing the label.

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

Inhalation of vapours may irritate the eyes, nose, throat and lungs. At high concentrations, the vapours may have narcotic effect. Prolonged or repeated inhalation may cause damage to the central nervous system.

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

Treated symptomatically

Information for the doctor:

Bring this safety data sheet.

SECTION 5: FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable methods of extinction

Prevent the effluent of fire-fighting measures from entering drains or waterways.

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Avoid breathing fumes/vapours. Wear self-contained breathing apparatus, gloves, safety spectacles and protective clothes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

<u>For first aid worker</u>

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

See section 13 on "Disposal" with regard to the handling of waste. See section 8 on 'Exposure controls/personal protection' for protective measures.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Fire prevention:

Handle in well-ventilated areas.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Prevent the accumulation of electrostatic charges with connections to earth.

The mixture can become electrostatically charged: always earth during decanting operations. Wear antistatic shoes and clothing and floors should be electrically non-conductive.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.

Provide vapor extraction at the emission source and also general ventilation of the premises.

Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.

In all cases, recover emissions at source.

Avoid eye contact with this mixture.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

Avoid accumulation of electrostatic charges.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- Denmark (2008):

| Stof | TWA | VSTEL | Loftvaerdi | Anm |
|---------|------------------------|-------|------------|-----|
| 67-63-0 | 200 ppm | | | |
| | 490 mg/m ³ | | | |
| 64-17-5 | 1000 ppm | | | |
| | 1900 mg/m ³ | | | |

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

| CAS | TWA: | STEL: | Ceiling: | Definition : | Criteria : |
|---------|------------------------|------------------------|----------|--------------|------------|
| 67-63-0 | 400 ppm | 500 ppm | | | |
| | 999 mg/m ³ | 1250 mg/m ³ | | | |
| 56-81-5 | - ppm | - ppm | | | |
| | 10 mg/m ³ | - mg/m³ | | | |
| 64-17-5 | 1000 ppm | - ppm | | | |
| | 1920 mg/m ³ | - mg/m³ | | | |

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

GLYCEROL (CAS: 56-81-5)

Final use:

Workers.

Exposure method: Potential health effects: DNEL:

Inhalation. Long term systemic effects. 56 mg of substance/m3

Final use:

Consumers.

Exposure method: Potential health effects: Ingestion. Long term systemic effects. 229 mg/kg body weight/day

DNEL:

Inhalation.

Exposure method:

Short term systemic effects.

Potential health effects: DNEL:

33 mg of substance/m3

PROPAN-2-OL (CAS: 67-63-0)

Final use:

Workers.

Exposure method:

Dermal contact.

Potential health effects:

Long term systemic effects.

DNEL:

888 mg/kg body weight/day

Exposure method:

Inhalation.

Potential health effects:

Long term systemic effects.

DNEL:

500 mg of substance/m3

Final use:

Consumers.

Exposure method:

Ingestion.

Potential health effects: DNEL:

Long term systemic effects. 26 mg/kg body weight/day

Exposure method: Potential health effects: Dermal contact.

DNEL:

Long term systemic effects. 319 mg/kg body weight/day

Exposure method:

Inhalation.

Potential health effects: Long term systemic effects. DNEL: 89 mg of substance/m3

Predicted no effect concentration (PNEC):

GLYCEROL (CAS: 56-81-5)

Environmental compartment: Soil.

PNEC: 0.141 mg/kg

Environmental compartment: Fresh water. PNEC : 0.885 mg/l

Environmental compartment: Sea water. PNEC : 0.088 mg/l

Environmental compartment: Intermittent waste water.

PNEC : 8.85 mg/l

Environmental compartment: Fresh water sediment.

PNEC: 3.3 mg/kg

Environmental compartment: Marine sediment. PNEC: 0.33 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC: 1000 mg/l

PROPAN-2-OL (CAS: 67-63-0)

Environmental compartment: Soil.
PNEC: 28 mg/kg

Environmental compartment: Fresh water. PNEC: 140.9 mg/l

 $\begin{array}{lll} \mbox{Environmental compartment:} & \mbox{Sea water.} \\ \mbox{PNEC:} & \mbox{140.9 mg/l} \end{array}$

Environmental compartment: Intermittent waste water.

PNEC: 140.9 mg/l

Environmental compartment: Fresh water sediment.

PNEC : 552 mg/kg

Environmental compartment: Marine sediment. PNEC: 552 mg/kg

Environmental compartment: Waste water treatment plant.

PNEC : 2251 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE):



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Prescription glasses are not considered as protection.

Wear eyeprotection/face shield if there is risk of splashes in eyes.

- Hand protection

Product is intended for use on hands

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Avoid breathing vapours.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Slightly basic.

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387:

- A1 (Brown)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Fluid liquid.

Important health, safety and environmental information

pH: 8.30 .

Boiling point/boiling range : $> 35^{\circ}\text{C}$ Flash Point Interval : FP < 23°C

Vapour pressure (50°C): Below 110 kPa (1.10 bar).

 $\begin{array}{lll} \text{Density:} & 0.85 \pm 0.02 \\ \text{Water solubility:} & \text{Soluble.} \\ \text{Melting point/melting range:} & \text{Not relevant.} \\ \text{Self-ignition temperature:} & \text{Not relevant.} \\ \text{Decomposition point/decomposition range:} & \text{Not relevant.} \\ \end{array}$

9.2. Other information

VOC (g/l): 653.18

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid:

- accumulation of electrostatic charges.
- heating
- heat
- flames and hot surfaces
- frost

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

11.1.1. Substances

Acute toxicity:

ETHANOL (CAS: 64-17-5)

Oral route: LD50 = 7060 mg/kg

Species: Rat

Dermal route : LD50 = 20000 mg/kg

Species : Rabbit

Inhalation route (n/a) : LC50 = 39 mg/l

Species : Mouse

GLYCEROL (CAS: 56-81-5)

Oral route : LD50 = 12600 mg/kg

Dermal route : LD50 = 18700 mg/kg

Species : Rabbit

PROPAN-2-OL (CAS: 67-63-0)

Oral route : LD50 = 5045 mg/kg

Species: Rat

Dermal route: LD50 = 12800 mg/kg

Species: Rabbit

Inhalation route (n/a): LC50 = 30 mg/l

Species: Rat

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer):

CAS 67-63-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 64-17-5: IARC Group 1: The agent is carcinogenic to humans.

CAS 67-63-0: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Substances

ETHANOL (CAS: 64-17-5)

Fish toxicity: LC50 < 16000 mg/l

Species : Oncorhynchus mykiss Duration of exposure : 96 h

Crustacean toxicity: EC50 > 10000 mg/l

Species : Daphnia magna Duration of exposure : 48 h

GLYCEROL (CAS: 56-81-5)

Fish toxicity: LC50 > 5000 mg/l

Species : Carassius auratus Duration of exposure : 24 h

Crustacean toxicity: EC50 > 10000 mg/l

Species : Daphnia magna Duration of exposure : 24 h

PROPAN-2-OL (CAS: 67-63-0)

Fish toxicity : LC50 > 100 mg/l

Species : Leuciscus idus Duration of exposure : 96 h

Crustacean toxicity: EC50 > 100 mg/l

Species : Daphnia magna Duration of exposure : 48 h

Algae toxicity: ECr50 > 100 mg/l

Species: Scenedesmus subspicatus

Duration of exposure: 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ETHANOL (CAS: 64-17-5) Biodegradability:

no degradability data is available, the substance is considered as not degrading

quickly.

GLYCEROL (CAS: 56-81-5)

Biodegradability: Rapidly degradable.

PROPAN-2-OL (CAS: 67-63-0)

Biodegradability: no degradability data is available, the substance is considered as not degrading

quickly.

12.3. Bioaccumulative potential

12.3.1. Substances

PROPAN-2-OL (CAS: 67-63-0)

Octanol/water partition coefficient: log Koe = 0.05

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste):

14 06 03 * other solvents and solvent mixtures

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2019 -IMDG 2018 - ICAO/IATA 2020).

14.1. UN number

1993

14.2. UN proper shipping name

UN1993=FLAMMABLE LIQUID, N.O.S. (propan-2-ol)

14.3. Transport hazard class(es)

- Classification :



14.4. Packing group

Ш

14.5. Environmental hazards

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14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---------|-------|---------|----------|----------|----------|---------|--------------|------------|-------------|--------|
| | 3 | F1 | П | 3 | 33 | 1 L | 274 601 640D | E2 | 2 | D/E |
| | | | | | | | | | | |
| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ | Stowage | Segregation | |
| | | | | | | | | Handling | | |
| | 3 | - | II | 1 L | F-E, S-E | 274 | E2 | Category B | - | |
| | | | | | | | | | | |
| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ | |
| | 3 | - | II | 353 | 5 L | 364 | 60 L | A3 | E2 | |
| | 3 | - | II | Y341 | 1 L | - | - | A3 | E2 | |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2018/1480 (ATP 13)
- EU Regulation No. 1272/2008 amended by EU Regulation No. 2019/521 (ATP 12)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H225 Highly flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Abbreviations :

DNEL: Derived No-Effect Level

PNEC: Predicted No-Effect Concentration

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

WGK: Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS07: Exclamation mark

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.