

# MATERIAL SAFETY DATA SHEET

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This MSDS has been prepared by PSK Pharma Pvt. Ltd., Quality Control Dept.

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:**

Ethyl Alcohol Gel

“Han’gel”

Instant Hand Sanitizer

**COMPANY:**

PSK Pharma Private Limited

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RECOMMENDED USE: Instant Hand Sanitizer Gel

## 2. COMPOSITION

Ingredient Name	CAS No.	Percentage
Ethyl Alcohol	64-17-5	60% w/w
as Ethyl Alcohol (95%v/v)		
Emollient	-	< 5% w/w
Fragrance	-	< 5% w/w
Purified water & other ingredients determined not to be hazardous	7732-18-5	qs to 100%

### 3. HAZARDS IDENTIFICATION

NOTE: DANGEROUS GOODS. NON-HAZARDOUS SUBSTANCE.

POISONS SCHEDULE: None allocated

#### RISK

Risk Codes	Risk Phrases
R10	Flammable.
R36	Irritating to eyes.

#### SAFETY

Safety Codes	Safety Phrases
S401	To clean the floor and all objects contaminated by this material use water and detergent.
S46	If swallowed IMMEDIATELY contact Doctor
S60	This material and its container must be disposed of as hazardous waste.

### 4. FIRST AID MEASURES

#### SWALLOWED

- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
- Observe the patient carefully.
- Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
- Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
- Seek medical advice.

#### EYE

- If this product comes in contact with the eyes:
- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

- No adverse effects anticipated from normal use.
- If unintended skin contact occurs:
- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

#### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- 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.

- Transport to hospital, or doctor.

#### NOTES TO PHYSICIAN

- Treat symptomatically.
- For acute or short term repeated exposures 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 (50-100 ml) 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.

### 5. FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

- Alcohol stable foam.
- Dry chemical powder.
- Carbon dioxide.
- Water spray or fog - Large fires only.

#### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapor fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Avoid spraying water onto liquid pools.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 500 meters in all directions.

#### FIRE/EXPLOSION HAZARD

- Liquid and vapor are flammable.
- Moderate fire hazard when exposed to heat or flame.
- Vapor forms an explosive mixture with air.
- Moderate explosion hazard when exposed to heat or flame.
- Vapor may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- Combustion products include: carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), other pyrolysis products typical of burning organic material.

#### FIRE INCOMPATIBILITY

- Avoid contamination with strong oxidizing agents as ignition may result

HAZCHEM: 2Y

## 6. ACCIDENTAL RELEASE MEASURES (SPILL)

### MINOR SPILLS

- Slippery when spilt.
- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up.
- Collect residues in a flammable waste container.

### MAJOR SPILLS

- Slippery when spilt.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse / absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the MSDS

## 7. HANDLING AND STORAGE

### PROCEDURE FOR HANDLING

- Remove all ignition sources.
- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- When handling DO NOT eat, drink or smoke.
- Always wash hands with soap and water after handling.
- Avoid physical damage to containers.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.

### SUITABLE CONTAINER

- Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.

### STORAGE INCOMPATIBILITY

- Avoid storage with oxidisers.

### STORAGE REQUIREMENTS

- Store in original containers in approved flammable liquid storage area.

- Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources.
- Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel - adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
- Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
- Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers - dry chemical, foam or carbon dioxide) and flammable gas detectors.
- Keep adsorbents for leaks and spills readily available.
- Protect containers against physical damage and check regularly for leaks.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Components with critical values that require monitoring at the workplace:**

**Ethyl Alcohol      64-17-5**

**ACGIH Threshold Limit Value (TWA) = 1000 ppm TWA**  
**NIOSH = 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA 3300 ppm IDLH**  
**OSHA - Final PELs = 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA**

Additional information: The lists that were valid during the compilation were used as basis.  
 Special Information, Exposure/Protection

The extent to which the following recommendations for exposure control and protection are observed should depend on the risk assessment undertaken for the specific conditions under which this product is used, including occupational hygiene measurements.

**Recommended Ventilation**  
 Use in a well-ventilated area.

**Eye Protection**  
 Avoid eye contact with vapour, spray, or mist.

**Hand Protection**  
 Not applicable.

**Respiratory Protection**  
 Avoid breathing vapours, mists or spray.

**Prevention of Accidental Ingestion**  
 Do not ingest. Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE**  
 Transparent slightly viscous flammable liquid with a characteristic citrus fragrance; mixes with water

**PHYSICAL PROPERTIES**  
 Liquid.  
 Mixes with water.  
 Molecular Weight: Not Applicable

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Boiling Range (°C): Not Available  
Melting Range (°C): Not Applicable  
Specific Gravity (water=1): 0.89- 0.91 @ 25°C  
Solubility in water (g/L): Miscible  
pH (as supplied): 5.0 - 7.0  
pH (1% solution): Not Available  
Vapour Pressure (kPa): Not Available  
Volatile Component (%vol): Not Available  
Evaporation Rate: Not Available  
Relative Vapour Density (air=1): Not Available  
Flash Point (°C): 25°C  
Lower Explosive Limit (%): 3.3  
Upper Explosive Limit (%): 19  
Autoignition Temp (°C): Not Available  
Decomposition Temp (°C): Not Available  
State: Gel  
Viscosity: Not Available

## 10 STABILITY AND REACTIVITY

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous reactions:** No dangerous reactions known.

**Dangerous products of decomposition:** None

## 11. TOXICOLOGICAL INFORMATION

**LD/LC50 values that are relevant for classification:**

### ETHANOL

#### TOXICITY

Oral (rat) LD50: 7060 mg/kg Skin (rabbit):20 mg/24hr- Moderate  
Oral (human) LDLo: 1400 mg/kg Skin (rabbit):400 mg (open)- Mild  
Oral (man) TDLo: 50 mg/kg Eye (rabbit):100mg/24hr- Moderate  
Oral (man) TDLo: 1.40 mg/kg Eye (rabbit): 500 mg SEVERE  
Oral (woman) TDLo: 256 mg/kg/12 wks  
Inhalation (rat) LC50: 20, 000 ppm/10h  
Inhalation (rat) LC50: 64000 ppm/4h

#### IRRITATION

Skin (rabbit):20 mg/24hr- Moderate  
Skin (rabbit):400 mg (open)- Mild  
Eye (rabbit):100mg/24hr- Moderate  
Eye (rabbit): 500 mg SEVERE

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.

#### IRRITATION

Nil Reported

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

## 12. ECOLOGICAL INFORMATION

### Information about elimination (persistence and degradability):

DO NOT discharge into sewer or waterways.  
Refer to data for ingredients, which follows:

#### ETHANOL:

Fish LC50 (96hr.) (mg/l): 13480

Algae IC50 (72hr.) (mg/l): 1450

log Kow (Sangster 1997): - 0.3

BOD5: 63%

ThOD: 2.1

Half- life Soil - High (hours): 24

Half- life Soil - Low (hours): 2.6

Half- life Air - High (hours): 122

Half- life Air - Low (hours): 12.2

Half- life Surface water - High (hours): 26

Half- life Surface water - Low (hours): 6.5

Half- life Ground water - High (hours): 52

Half- life Ground water - Low (hours): 13

Aqueous biodegradation - Aerobic - High (hours): 26

Aqueous biodegradation - Aerobic - Low (hours): 6.5

Aqueous biodegradation - Anaerobic - High (hours): 104

Aqueous biodegradation - Anaerobic - Low (hours): 26

Aqueous biodegradation - Removal secondary treatment - High (hours): 67%

Photooxidation half- life water - High (hours): 3.20E+05

Photooxidation half- life water - Low (hours): 8020

Photooxidation half- life air - High (hours): 122

Photooxidation half- life air - Low (hours): 12.2

DO NOT discharge into sewer or waterways.

log Kow: -0.31- -0.32

Half-life (hr) air: 144

Half-life (hr) H2O surface water: 144

Henry's atm m<sup>3</sup> /mol: 6.29E-06

BOD 5 if unstated: 0.93-1.67,63%

COD: 1.99-2.11,97%

ThOD: 2.1

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 hydroxyl radicals; release into air will result in photodegradation and wet deposition.

## 13. DISPOSAL CONSIDERATIONS

- Consult manufacturer for recycling options and recycle where possible .
- Consult State Land Waste Management Authority for disposal.
- Incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorized landfill.

## 14. TRANSPORT INFORMATION

Labels Required: FLAMMABLE LIQUID  
HAZCHEM: 2[Y]  
UNDG:  
Dangerous Goods 3 Subrisk: None  
Class:  
UN Number: 1170 Packing Group: III  
Shipping Name: ETHANOL SOLUTION

### **Air Transport IATA:**

ICAO/IATA Class: 3 ICAO/IATA Subrisk: None  
UN/ID Number: 1170 Packing Group: III  
Special provisions: A3 A58 A148  
Shipping Name: ETHANOL

### **Maritime Transport IMDG:**

IMDG Class: 3 IMDG Subrisk: None  
UN Number: 1170 Packing Group: III  
EMS Number: F- E, S- D Special provisions: 144 223 330  
Limited Quantities: 5 L  
Shipping Name: ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION  
(ETHYL ALCOHOL SOLUTION)

## 15. REGULATORY INFORMATION

### **Designation according to EC guidelines:**

As a drug/ cosmetic preparation, the product is not subject to the provisions of the Chemical Law and the Ordinance on Hazardous Materials. However, normal safety regulations should be observed.

### **Risk phrases:**

10 Flammable.  
41 Risk of serious damages to eyes.  
67 Vapours may cause drowsiness and dizziness.

### **Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
46 If swallowed, seek medical advice immediately and show container or label.

## 16. OTHER INFORMATION

### **Relevant R-phrases:**

11 Highly flammable  
22 Harmful if swallowed  
36 Irritating to eyes.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.  
67 Vapours may cause drowsiness and dizziness.





**PSK PHARMA PRIVATE LIMITED**  
**PSK/MSDS/62**

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet, which involves using the product, or otherwise that in accordance with instructions of use on product packaging is the responsibility of the user. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the Quality Control In-charge at +91 8192 240 318.