

Material Safety Data Sheet

Product Name : Alcool Eradication Gel HND KX(78.85%)

1. Informations of manufacturer and their products

(1) Informations of manufacturer

Company name of supplier : Shammah Pharm Co. Ltd.
Address : 43, Gatbachi-ro, Danwon-gu, Ansan-si, Kyeonggi-do,
Repulic of South Korea
Telephone : +82-31-8042-3431
Emergency telephone number : +82-31-8042-3431(Only during working hours)

(2) Product name

Alcool Eradication Gel HND KX(78.85%)

(3) Recommended use :

Indoor (walls, floors, etc.), furniture, cars, textiles (curtains, clothing, bedding, etc.),
disinfection of shoes, toilets, etc., antibacterial

(4) Precautions

1) Do not use

Mucous membrane and damaged skin(irritation)

2) Consultation with a doctor if you have any of the following symptoms

- 1) Rash, itching and hypersensitive
- 2) Skin irritation

3) Others

- ① Use only for external
- ② **Eye Contact:** Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.
- ③ **Inhalation:** Remove person to fresh air. If you feel unwell, get medical attention.

4) Prevention:

- ① Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
- ② Keep out of reach of children. IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. Call a POISON centre or doctor/physician if you feel unwell.
- ③ **Storage:** Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

2. Composition and Ingredients

Ingredients	Contents(%)	Ingredients	Contents(%)
Ethanol	78.85	Propylene glycol	0.005
Water	20.83	Isopropyl myristate	0.005
Glycerin	0.01	Trolamine	0.039
Carbomer	0.26	Aloe-X	0.001

3. Hazard identification

(1) Hazard statements

Highly flammable liquid and vapour.

Causes serious eye irritation. May cause drowsiness or dizziness.

(2) Symbol

○ Pictograms



○ Signal word : Danger

○ Hazard statements (GHS-US)

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H350 - May cause cancer (Ingestion)

H361 - Suspected of damaging the unborn child (Ingestion)

H370 - Causes damage to organs (central nervous system, optic nerve) (oral, Dermal)

○ Precautionary statements (GHS-US)

Protect

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P260 - Do not breathe mist, spray, vapors

P264 - Wash exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P280 - Wear eye protection, face protection, protective clothing, protective gloves

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

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P337+P313 - If eye irritation persists: Get medical advice/attention

P370+P378 - In case of fire: Use carbon dioxide (CO₂), powder, alcohol-resistant foam to extinguish

Storage

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

Disposal

p501 Disposal: Dispose of contents/container to a specialised waste disposal plant in accordance with local/regional regulations.

4. Composition, information on ingredients

(1) Chemical name : Ethyl Alcohol

Synonyms : Ethanol

Chemical abstract No : 64-17-5

Content : 76~83 %

(2) Chemical name : Water

Chemical abstract No : 7732-18-5

Content : 24~17 %

5. Emergency responders

(1) Product in eye : Flush immediately with water or neutral saline solution for at least 15 minutes. Seek medical attention.

(2) Product on skin : Remove contaminated clothing and rinse contaminated area with soap and water. If skin irritation persists, seek medical attention.

(3) Product inhaled : Remove the victim to fresh air. If not breathing, ensure open airway and institute cardiopulmonary resuscitation (CPR). If breathing is weak, irregular or has stopped apply artificial respiration. Oxygen may be beneficial. Keep affected person warm and at rest. Get immediate medical attention.

(4) Product ingested : If victim is conscious, give 1-3 glasses of water or milk to dilute stomach contents. If spontaneous vomiting occurs, or when vomiting is induced, monitor for breathing difficulty. Do not make an unconscious or semi-conscious person vomit. Keep affected person warm at rest. Get medical attention for substantial ingestions and/or gastrointestinal symptoms.

6. Fire - fighting Measures

(1) Extinguishing media :

Suitable extinguishing media : Water spray. Alcohol-resistant foam. BC powder. Carbon dioxide.

(2) Fire hazard :

DIRECT FIRE HAZARD. Highly flammable. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard :

DIRECT EXPLOSION HAZARD. Gas/vapour explosive with air within explosion limits.

INDIRECT EXPLOSION HAZARD. may be ignited by sparks. Reactions with explosion hazards: see "Reactivity Hazard".

Reactivity : Upon combustion: CO and CO₂ are formed. Reacts violently with many compounds e.g.: with (strong) oxidizers: (increased) risk of fire/explosion. Violent to explosive reaction with (some) acids.

7. Accidental Release Measures

(1) Precaution cases

1) Personal precautions : Protective clothing should be worn to prevent excessive skin contact.

2) Environmental precautions : Prevent liquid entering sewers. Do not allow to enter surface waters, storm drains, etc.

3) Small spills : Take immediate steps to stop and contain the spill. Caution should be exercised regarding personnel safety and exposure to be spilled material. Eliminate all sources of ignition and wear protective clothing. Absorb small spills onto paper towels and evaporate in a safe place e.g. in a fume hood. Flush the contaminated area with plenty of water.

4) Large spills : Stop leak if you can do it without risk. Contact your local fire department. Eliminate all sources of ignition and static; restrict access to area until completion of clean-up procedure. Wear adequate protective equipment, use self-contained breathing apparatus in confined poorly-ventilated areas. Large quantities should be absorbed on to sand, vermiculite or an equivalent absorbent material and removed to a safe area for disposal. Flush the contaminated area with plenty of water. Incineration is the recommended method of disposal.

(2) Methods and material for containment and cleaning up :

1) For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.

2) Methods for cleaning up : Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite or kieselguhr, powdered limestone. Scoop absorbed substance into closing containers. See "Material handling" for suitable container materials. Carefully collect the spill/leftovers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

8. Handling and storage

(1) Avoid eye contact. Keep out of reach of children. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Use only non-sparking tools. Take precautionary measures against static discharge. Avoid reathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash

thoroughly after handling.

Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation.

Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

(2) Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat.

Store away from acids. Store away from oxidizing agents.

9. Exposure controls

(1) Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

(2) Personal protective equipment : Safety glasses. Gloves. Protective clothing.



(3) Materials for protective clothing : GIVE EXCELLENT RESISTANCE: butyl rubber. viton. GIVE GOOD RESISTANCE: neoprene. tetrafluoroethylene. GIVE LESS RESISTANCE: nitrile rubber. polyethylene. GIVE POOR RESISTANCE: natural rubber. PVA. PVC.

(4) Hand protection : Gloves.

(5) Eye protection : Safety glasses.

(6) Skin and body protection : Protective clothing.

(7) Respiratory protection : Wear gas mask with filter type A if conc. in air > exposure limit.

(8) Other information : Do not eat, drink or smoke during use.

10. Information on basic physical and chemical properties

Physical state : Liquid

Appearance/Odour : White viscous liquid with slight alcohol odour.

Odour threshold : 10 ppm

pH : 7

Melting point/Freezing point : -114.1 °C

Boiling point/Initial boiling point/Boiling range : 78.5°C

Flash Point : 13°C

Evaporation rate : 1.4(Carbon tetrachloride=1)

Flammability (solid, gas): Not Applicable

Flammable Limits(LEL/UFL) : 3.28/19 % volume

Vapour Pressure : 59.3 mm Hg (25°C)

Solubility : 100g/100 ml (25°C)

Vapor density : 1.59 (Air=1)

Relative density : 0.83(WATER=1)

Partition coefficient : -0.31

Autoignition temperature : 363°C

Decomposition temperature : ~~No Data~~

Viscosity : 1.17 cP (20°C)

Molecular weight 46.07

11. Stability and reactivity

(1) Reactivity : This material may be reactive with certain agents under certain conditions – see the remaining headings in this section.

(2) Chemical stability : Stable.

(3) Possibility of hazardous reactions : Hazardous polymerization will not occur

(4) Conditions to avoid : Heat, Sparks and/or flames

5) Incompatible materials : No Data Available

(6) Hazardous decomposition products

Carbon monoxide During Combustion

Carbon dioxide During Combustion

12. Toxicological information

The information below may not be consistent with the material classification in products if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

(1) Information on Toxicological effects

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation: Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin Contact: Contact with the skin during product use is not expected to result in significant

irritation.

Eye Contact: Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion: May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

(2) Health hazard information

Acute Toxicity

Oral : LD50 6200 mg / kg Rat

Transdermal : No data available

Inhalation : LC50 20000 ppm 10 hr Rat

Skin Corrosion/Irritation : Non-irritant

Serious Eye Damage/Irritation : Moderate stimulation

Respiratory Sensitization : No data available

Skin Sensitization : No data available

Carcinogenicity : No data available

IARC : Group 1 (Drinking too much alcohol)

OSHA : No data available

ACGIH : A3

NTP : No data available

EU CLP : No data available

Germ Cell Mutagenicity : Some positive data exist, but the data are not sufficient for classification

Specific Target Organ Toxicity – single exposure : Some positive data exist, but the data are not sufficient for classification

13. Ecological informations

No data available

14. Disposal considerations

Dispose of contents/ container in accordance with the local/regional/national/international

regulations.

15. Transport information

(1) UN number : 1170

(2) ETHANOL(ETHYL ALCOHOL) or ETHANOL SOLUTION(ETHYL ALCOHOL SOLUTION))

16. Regulatory information

(1) Industrial Safety and Health Act : Exposure limit substance

(2) Toxic Chemical Control Act : Not available

(3) Safety Control of Dangerous Substances Act : Class 4 alcohols(400 ℓ)

(4) Waste Management Act : specified/designated waste

(5) Other domestic and foreign regulations

Domestic : Not available

International : OSHA regulation : Not available

CERCLA regulation : Not available

EPCRA 302 regulation : Not available

EPCRA 304 regulation : Not available

EPCRA 313 regulation : Not available

EU classification : F; R11, S2, S7, S16