



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE

Product name	Mosquito Repellent Towelettes
Product type	Mosquito wipes
Use	Repelling of mosquitoes
Manufacturer	Kapi Limited

2. COMPOSITION/INFORMATION ON INGREDIENTS

NAME OF INGREDIENT	FUNCTION	CONCENTRATION	CAS NUMBER
DEET	Active Ingredient	8%	134-62-3

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Isopropyl Alcohol is Flammable Liquid and Vapor. Harmful if swallowed or inhaled.

May cause irritation to eyes and respiratory tract if swallowed.

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation Breathing in small amounts of this material during normal handling is not likely to cause harmful effects. However, breathing large amounts may be harmful and may affect the respiratory system and mucous membranes (irritation), behavior and brain (Central nervous system depression - headache, dizziness, drowsiness, stupor, incoordination, unconsciousness, coma and possible death), peripheral nerve and sensation, blood, urinary system, and liver.

Eye Can cause eye irritation.

Skin It is safe to use on skin

Ingestion *Swallowing small amounts* during normal handling is not likely to cause harmful effects.

Swallowing large amounts may be harmful. Swallowing large amounts

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may cause gastrointestinal tract irritation with nausea, vomiting and diarrhea, abdominal pain. It also may affect the urinary system, cardiovascular system.

POTENTIAL CHRONIC HEALTH EFFECTS

Carcinogenic Effects	Classified A4 (Not classifiable for human or animal.) by ACGIH, ³ (Not classifiable for human.) by IARC [Isopropyl alcohol].
Mutagenic Effects	Not classified
Teratogenic Effects	Not classified

4. FIRST AID MEASURES

If poisoning is suspected regardless of the route through which DEET may have entered the body immediate medical attention should be sought.

Symptoms and effects:	Not expected to give rise to an acute hazard under normal conditions of use. Under high temperature conditions, vapours irritating to the nose, throat and upper respiratory tract may be produced.
Inhalation:	Remove the affected person to fresh air
Ingestion:	Wash out mouth with water and seek medical help immediately.
Skin:	Product is safe to use on skin.
Eyes:	Flush with copious quantities of water. If irritation persists, seek medical attention.

5. FIRE FIGHTING MEASURES

General Information	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Suitable Extinguishing Agents	Small Fire: Use DRY chemical powder. Large Fire: Use alcohol foam, water spray or fog.
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Special Fire	
Fighting Procedures:	Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear (bunker gear).

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Special Remarks on Fire and Explosion Hazards:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Keep personnel removed and upwind of fire. Water should be used to keep fire-exposed containers cool.

Slightly explosive in presence of open flames and sparks of heat. Non-explosive in presence of shocks. Vapor may travel considerable distance to source of ignition and flash back.

CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME. Hydrogen peroxide sharply reduces the autoignition temperature of Isopropyl alcohol. After a delay, Isopropyl alcohol ignites on contact with dioxigenyl tetrafluorborate, chromiumtrioxide, and potassium tert-butoxide. When heated to decomposition it emits acrid smoke and fumes. (Isopropyl alcohol). Secondary alcohols are readily auto-oxidised in contact with oxygen or air, forming ketones and hydrogen peroxide. It can become potentially explosive. It reacts with an oxygen to form dangerously unstable peroxides which can concentrate and explode during distillation or evaporation. The presence of 2-butanone increases the reaction rate for peroxide formation.

Explosive in the form of vapor when exposed to heat or flame. May form explosive mixtures with air.

6. ACCIDENTAL RELEASE MEASURES

General

Environmental Precautions:

Use proper personal protective equipment as indicated in Section 8.

Do not release to sewer, surface water or ground water.

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Methods and Material for

Containment and Cleaning Up: **Small Spill:** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill: Contains flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas. Be careful that the product is not present at a concentration level above TLV.

7. HANDLING AND STORAGE

Precautions

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from in compatibles such as oxidizing agents, acids.

Storage

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls	Provide adequate ventilation
Hygiene measures	Wash hands with soap and water before eating, drinking, smoking and using the toilet
Respiratory protection	Normal (Mechanical) exhaust
Hand protection	N/A
Eye protection	N/A
Skin Protection	N/A

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Towelettes
Colour:	White
Odour:	Mild alcohol smell
pH:	N/A
Melting Point:	N/A
Boiling Point:	N/A
Solubility:	N/A
Flash Point: Closed cup: 18.3°C - 24°C:	71°F (21.6°C)
Auto-ignition Temperature:	399°C
Flammability:	Flammable liquid 1B

10. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions
Polymerisation:	Will not occur
Dangerous	
Decomposition Products:	Not available
Conditions to Avoid:	Heat, flame, ignition, sources, incompatible materials
Incompatible Materials:	Reactive with oxidizing agents, acids, alkalis

Special Remarks on Reactivity

Reacts violently with hydrogen plus palladium combination, nitroform, oleum, COCl₂, aluminum triisopropoxide, oxidants Incompatible with acetaldehyde, chlorine, ethylene oxide, isocyanates, acids, alkaline earth, alkali metals, caustics, amines, crotonaldehyde, phosgene, ammonia.

Isopropyl alcohol reacts with metallic aluminum at high temperatures. Isopropyl alcohol attacks some plastics, rubber, and coatings. Vigorous reaction with sodium dichromate plus sulfuric acid. (Isopropyl alcohol).

11. TOXICOLOGICAL INFORMATION

Please refer to section 3 for Hazards Identification

Routes of Entry:	Absorbed through skin. Eye contact. Inhalation
Toxicity to Animals:	Acute oral toxicity (LD50): 5143 mg/kg (Mouse) Acute dermal toxicity (LD50): 18286 mg/kg (Rabbit)

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Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [Isopropyl alcohol].

12. ECOLOGICAL INFORMATION

Products of Biodegradation: Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose according to Federal, State, Provincial and Local regulations.

14. TRANSPORT INFORMATION

UN Number: 1987
UN proper shipping name: Environmentally Hazardous Substance LIQUID N.O.S (Alcohol)
Transport hazard class: 3.2
Packing group: III
Environmentally hazard substance: Acute aquatic toxicity, marine pollutant.

15. REGULATORY INFORMATION

This product is evaluated by KeBS and found to meet the specifications of Kenya Bureau of Standards regulation number 789:2013, East African Standards



R-Phrases

- a) R11- Highly flammable
- b) R41- Risk of serious eye damage
- c) R50- Very toxic to aquatic organisms
- d) R53- May cause long term adverse effects in the aquatic environment

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S-Phrases:

- a) S2- Keep out of reach of children
- b) S25-Avoid contact with eyes
- c) S36- In case of contact with eyes, rinse immediately with plenty of water, seek medical attention.
- d) S24 – If swallowed, seek medical advice immediately

Legal disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements & local regulations. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Review Date:

28th / July / 2021



Kapi Limited is certified as meeting the requirements of ISO 9001:2015

