1. Identification of the Product and Company

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>METHYLATED SPIRIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code:</td>
<td>MET01306F</td>
</tr>
<tr>
<td>Other Names:</td>
<td>None allocated</td>
</tr>
<tr>
<td>Use:</td>
<td>Methylated Spirit is a commercial grade disinfectant.</td>
</tr>
</tbody>
</table>

Company Name & Contact Details

Distributed by Perrigo Australia
Orion Laboratories Pty. Ltd., trading as Perrigo Australia
ABN 56 009 293 136
25-29 Delawney Street, Balcatta, Western Australia 6021 AUSTRALIA
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Other Information

All reasonable care has been taken to ensure information and advice contained in this data sheet is accurate at time of printing. However, Orion accepts no liability for any loss or damages suffered as a consequence of reliance on the information contained herein.

2. Hazards Identification

Hazard Classification: Hazardous Substance – Dangerous Good. DG Class 3

Risk phrase(s)
- R11 – Highly flammable
- R20/22 – Harmful by inhalation and if swallowed
- R36/38 – Irritating to the eyes and skin
- R66 – Repeated exposure may cause skin dryness and cracking

Safety phrase(s)
- S7 – Keep container tightly closed
- S16 – Keep away from sources of ignition – No smoking
- S23 – Do not breathe vapour
- S29 – Do not empty into drains
- S33 – Take precautionary measures against discharges
- S24/25 – Avoid contact with skin and eyes
- S36/37/39 – Wear suitable protective clothing/gloves and eye/face protection.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Entity</th>
<th>CAS No:</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol (ethanol)</td>
<td>64-17-5</td>
<td>&gt; 60% v/v</td>
</tr>
<tr>
<td>Denaturant</td>
<td>-</td>
<td>&lt; 1% v/v</td>
</tr>
<tr>
<td>Purified Water</td>
<td>7732-18-5</td>
<td>to 100% v/v</td>
</tr>
</tbody>
</table>

4. First Aid Measures

**Inhalation:** Remove promptly to fresh air and keep warm. Seek medical attention if drunkenness, respiratory irritation, dizziness, nausea or headache occurs. If breathing should stop, apply artificial respiration immediately.

**Ingestion:** Contact doctor or Poisons Information Centre (at once). Give large amounts of water to drink, to a conscious person. DO NOT induce vomiting.

**Skin:** Remove contaminated clothing and wash area with water. Launder clothing before reuse.

**Eye:** Hold eyelids open and flush area with gently running water for at least 15 minutes. Seek medical attention. Australia - Poisons Information 13 11 26.

**Advice to Doctor:** Treat symptomatically. If intoxication or narcosis is present, treat as for excess consumption of alcoholic drink. Care should be taken during emesis to prevent aspiration of the return of flow. If respiration is depressed, assisted respiration may be necessary.
5. Fire Fighting Measures

Specific Hazards: Highly flammable liquid. May form flammable mixtures with air. Burns with colourless flame. Vapour is heavier than air & may travel along the ground; distant ignition and flash back are possible. Avoid pooling on surfaces. Avoid run off to sewers & drains (may cause explosions).

Extinguishing Media: Water fog/ fine spray, dry chemical, carbon dioxide or alcohol stable foam.

Hazard from Combustion: Carbon monoxide and/or carbon dioxide. Remove containers from path of fire. Heating can cause expansion and rupture of containers. Keep containers cool with water spray.

Precautions & Equipment for Fire Fighters: Fire-fighters should wear self-contained breathing apparatus as exposure to vapour or combustion products is likely. Vapour is heavier than air and may travel along the ground. Distant ignition is possible.

Hazchem Code: 2[Y]E

6. Accidental Release Measure

Eliminate all possible sources of ignition; take measures to prevent static discharge – no smoking. Prevent run-off from entering drains & waterways. Stop & contain spill; avoid entry into drains & waterways; use inert absorbent material (sand, vermiculite). Dispose all waste containers and used drums in accordance with local authority guidelines. Ventilate area well. Cleanup personnel to wear suitable respirator to minimise inhalation & protective clothing (eg gloves) to avoid skin contact. Potentially flammable material can be rendered inert by mixing with large volumes of water.

7. Handling and Storage

Safe Handling Practices: Use in well ventilated area. Alcoholic solutions are highly flammable.
- Avoid pooling on surfaces.
- Do not use near a naked flame or other ignition source.

Storage: Store away from sources of heat or ignition. Store in a well-ventilated area and keep containers closed when not in use to avoid evaporation. Store below 25°C. Protect from light.

Other Information: Should not be stored or transported with flammable gases, poisonous gases, explosives, spontaneously combustible substances, oxidising agents, organic peroxides, radioactive substances or foodstuffs.

8. Exposure Controls; Personal Protection

Exposure Limits: Ethanol TWA – 1000ppm (1880 mg/m³); Time weighted average airborne concentration per 8 hour working day per 5 day working week over an entire working life.

Engineering Controls: Special precautions are not required under normal conditions of use. Avoid breathing vapour. Local exhaust ventilation required in high vapour concentration such as confined spaces. Ensure ventilation is adequate to maintain concentrations below exposure standards.

Personal Protection: Avoid eye and skin contact. If spillage or splashing is likely to occur during handling, wear safety spectacles. Approved barrier creams may prove useful in preventing dermatitis when prolonged skin contact is unavoidable, else wear PVC gloves. Breathing apparatus may be of assistance if working with large volumes in confined spaces. Wash hands after use. Do not smoke.

9. Physical and Chemical Properties

Appearance/Odour: A pale yellow, clear, mobile volatile liquid with characteristic odour.

Refractive Index: 1.320 – 1.380

Vapour Pressure: 44 mm Hg @ 20°C (Ethanol)

Vapour Density: 1.59

Boiling Point: 78°C

Solubility: Miscible with water.

Specific Gravity or Density: 0.795 – 0.815g/mL

Flash Point: 13°C Abel closed cup

Percent Volatiles: Approx. 95% v/v

Lower Flammability Limits: 3.5% v/v (in air @ 20°C)

Upper Flammability Limits: 19.0% v/v (in air @ 20°C)
10. Chemical Stability and Reactivity Information

**Conditions Contributing to Instability**
This product is stable.

**Hazardous Polymerisation:**
Will not occur

**Incompatible Materials:**
Will react with strong oxidising agents

**Conditions to avoid:**
Heat, sparks, flame and build-up of static electricity

**Hazardous Decomposition:**
Burning can produce carbon monoxide and/or carbon dioxide.

11. Toxicological Information

**Inhalation:**
Moderately irritating to mucous membranes and respiratory system. Vapours can affect the central nervous system and result in headaches and dizziness, nausea, sleepiness. Prolonged exposure to high concentration of vapours may cause unconsciousness. Excessive chronic absorption by inhalation or ingestion can result in liver injury.

**Ingestion:**
Ingestion can lead to headache, dizziness, dullness, gastric disorder, nausea and central nervous system depression. Large doses may cause severe intoxication, tremors, convulsions, drowsiness, blurred vision, coma, respiratory arrest, unconsciousness and death.

**Skin:**
Repeated or prolonged contact may cause skin irritation and dermatitis.

**Eye:**
Vapours may irritate the eyes. Liquid and mists may severely irritate the eyes and cause corneal damage.

**Chronic:**
Repeated or prolonged contact with the skin may cause irritation and may eventually lead to dermatitis. Excessive chronic absorption by inhalation or ingestion can result in liver, kidneys, gastrointestinal tract and heart muscle damage.

**Animal Toxicity:**
Ethanol: LD50/oral/rat: 7060 mg/kg; LC50/inhalation/rat 38 mg/L/10h
LD50/oral/rat: 7060 mg/kg (ethanol 100%)
LD50/inhalation/rat: 38 mg/L/10 h (ethanol 100%)

12. Ecological Information

**Mobility in Soil:**
No data available

**Persistence and Degradability:**
Degree of elimination: 94%
Evaluation: biodegradable

**Ecotoxicity:**
Toxicity to fish (acute) LC50/Golden ide/: >1000mg/L/48h
Toxicity to daphnia: EC50/Daphnia magna/: > 1000mg/L/24h

13. Disposal Considerations

**Disposal Methods & Containers:**
Do not dispose into sewerage systems, drains or waterways. Rinse containers in water prior to disposing or recycling.

**Special Disposal for Landfill or Incineration:**
Waste material may be incinerated under controlled conditions where permitted. Refer to local Waste Management Authority Regulations for other approved methods.

14. Transport Information

**UN Number:**
1170

**UN Proper Shipping Name:**
Ethanol Solutions

**DG Class & Packing Group:**
3, PG II

**Hazchem Code:**
2[Y]E
### 15. Regulatory Information

<table>
<thead>
<tr>
<th>Poisons Schedule:</th>
<th>Not scheduled</th>
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<tbody>
<tr>
<td>Classification:</td>
<td>Hazardous according to criteria of NOHSC.</td>
</tr>
<tr>
<td></td>
<td>Dangerous Good according to criteria of the Australian Dangerous Good Code.</td>
</tr>
</tbody>
</table>

### 16. Other Information

| References: | MSDS-065 Special Methylated Spirits, Industrial Methylated Spirits, IMS Solutions & Special Methylated Spirits Solutions 08/2008 CSR |

END OF MSDS