



# MATERIAL SAFETY DATA SHEET

## ALCOHOL 95% B.P.

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### 1. Identification of the Product and Company

<b>Product Name:</b>	<b>ALCOHOL 95% B.P.</b>
<b>Product Code:</b>	ALC00822F
<b>Other Names:</b>	Ethanol; Ethyl Alcohol
<b>Use:</b>	General laboratory reagent or for the preparation of pharmaceutical products.
<b>Company Name &amp; Contact Details</b>	Drug Information Pharmacist ORION Laboratories Pty Ltd ABN 56 009 293 136 25-29 Delawney Street, Balcatta, Western Australia 6021 AUSTRALIA <b>Telephone (all hours): +618 9441 7800</b> FREE PHONE: 1800 805 546 FREE FAX: 1800 004 110 EMAIL: customerservice@orion.net.au; WEBSITE: www.orion.net.au ORION® is a registered trademark of Orion Laboratories Pty Ltd
<b>Other Information</b>	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

<b>Hazard Classification</b>	<b>HAZARDOUS SUBSTANCE. DANGEROUS GOOD.</b>
<b>Risk phrase(s)</b>	R11 – Highly Flammable; R40 – Possible risks of irreversible effects; R66 – Repeated exposure may cause skin dryness and cracking; R20/22 – Harmful by inhalation and if swallowed; R36/38 – Irritating to the eyes and skin.
<b>Safety phrase(s)</b>	S7 - Keep container tightly closed; S16 - Keep away from sources of ignition – no smoking; S29 – Do not empty into drains. S33 – Take precautionary measures against static discharges. S45 – In case of accident or if you feel unwell seek medical advice immediately (show the label whenever possible). 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

<b>Chemical Entity</b>	<b>CAS No:</b>	<b>Proportion</b>
Ethanol (alcohol)	64-17-5	95% v/v
Water - purified	7732-18-5	to 100% v/v

### 4. First Aid Measures

<b>Inhalation:</b>	Remove patient to fresh air. If respiratory irritation, dizziness, nausea or headache occurs, seek immediate medical attention. Apply artificial respiration if breathing stops.
<b>Ingestion:</b>	If swallowed, give large amounts of water to drink. Do not induce vomiting. Contact a doctor or Poisons Information Centre.
<b>Skin:</b>	Remove contaminated clothing and wash skin with water. Launder contaminated clothing before use.
<b>Eye:</b>	Hold eyelids open and flush eye with gently running water for at least 15 minutes. Seek medical attention promptly if irritation persists.
<b>Advice to Doctor:</b>	Care should be taken during emesis to prevent pulmonary aspiration of the return flow. If respiration is depressed, assisted respiration may be necessary.

## 5. Fire Fighting Measures

*Highly flammable liquid.* Burns with a colourless flame. Eliminate all possible sources of ignition. Ventilate area well. Contain using sand or earth and use an absorbent (sand, sawdust, vermiculite) where appropriate. Collect and seal in properly labelled containers for disposal. Wash area down with excess water.

<b>Extinguishing Media</b>	Water fog/spray, carbon dioxide, dry chemical powder, carbon dioxide or alcohol stable foam.
<b>Hazards from Combustion products</b>	On burning may emit toxic fumes including carbon monoxide and carbon dioxide. Remove containers from path of fire. Heating can cause expansion and rupture of containers. Keep containers cool with water spray.
<b>Precautions &amp; Equipment for Fire Fighters</b>	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.
<b>Hazchem Code</b>	2[Y]E

## 6. Accidental Release Measure

Eliminate all possible sources of ignition; take measures to prevent static discharge. 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.

## 7. Handling and Storage

<b>Safe Handling Practices</b>	Alcoholic solutions are highly flammable. <ul style="list-style-type: none"> <li>▪ Avoid pooling on surfaces.</li> <li>▪ Do not use near a naked flame or other ignition source.</li> </ul>
<b>Storage</b>	Should not be stored or transported with flammable gases, explosives, spontaneously combustible substances, oxidising agents or foodstuffs. 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.

## 8. Exposure Controls; Personal Protection

<b>Exposure Limits</b>	Ethanol 1000ppm; 100% 1880mg/m <sup>3</sup>	TWA: time weighted average airborne concentration over an eight-hour day, for a five-day working week over an entire working life.
<b>Engineering Controls</b>	Respiratory protection is not necessary under normal circumstances. Maintain concentration below recommended exposure limit & use with adequate ventilation at all times. In high vapour concentrations, (eg empty vessels or confined spaces) use air-supplied hood; where ethanol concentrations are in excess of 500ppm, use an organic vapour respirator (AS/NZS 1715,1716)	
<b>Personal Protection</b>	Avoid contact with eyes and broken skin. If spillage or splashing is likely to occur during handling, wear safety spectacles (AS/NZS 1336). Approved barrier creams may prove useful in preventing dermatitis when prolonged skin contact is unavoidable; use PVC or neoprene gloves/aprons (AS 2161). Wash hands before smoking, eating, drinking or using the toilet. Do not smoke.	

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Thin, colourless, water miscible, mobile liquid with odour of ethanol.		
<b>pH:</b>	Not known	<b>Flash point</b>	15°C (closed cup)
<b>Vapour Pressure:</b>	<58.1mbar@20°C	<b>Solubility:</b>	Miscible
<b>Vapour Density:</b>	Not known	<b>Specific Gravity or Density:</b>	0.7904 (water=1)
<b>Boiling Point:</b>	Not known	<b>Percent Volatiles</b>	95% v/v

## 10. Stability and Reactivity

<b>Chemical Stability:</b>	Stable
<b>Hazardous Polymerisation:</b>	Will not occur
<b>Incompatible Materials:</b>	Will react with strong oxidizing agents
<b>Conditions to Avoid:</b>	Heat, sparks, flame and build-up of electricity.
<b>Hazardous Decomposition:</b>	Burning can produce carbon monoxide and/or carbon dioxide

## 11. Toxicological Information

<b>Inhalation:</b>	Moderately irritating to mucous membranes.
<b>Ingestion:</b>	May cause nausea and vomiting. Aspiration may cause lung damage.
<b>Skin:</b>	May cause irritation and reddening.
<b>Eye:</b>	Vapour may irritate the eyes. Liquid or mist may irritate or damage the eyes
<b>Chronic:</b>	Long term exposure by swallowing or repeated inhalation may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.

## 12. Ecological Information

<b>Mobility in Soil:</b>	Not known.
<b>Persistence and Degradability:</b>	No data available; Degree of elimination (ethanol 100%) 94%
<b>Ecotoxicity:</b>	Toxicity to fish: > 1000mg/l/48h.

## 13. Disposal Considerations

<b>Disposal Methods &amp; Containers:</b>	Wash empty containers with water. Waste material may be incinerated under controlled conditions where permitted. Refer to local Waste Management Authority Regulations for other approved methods. Empty containers should be decontaminated by rinsing with water prior to disposal.
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## 14. Transport Information

<b>UN Number:</b>	UN number 1170. Dangerous substance for the purpose of transport. Refer to appropriate State Regulations for storage and transport requirements.
<b>UN Proper Shipping Name:</b>	Ethanol Solutions
<b>DG Class &amp; Packing Group:</b>	Classified as Flammable Liquid class 3, PG II.
<b>Hazchem Code:</b>	2[Y]E

## 15. Regulatory Information

<b>Poisons Schedule:</b>	Not scheduled
<b>Classification:</b>	Hazardous according to criteria of NOHSC. Dangerous Good according to criteria of the ADG Code.

## 16. Other Information

<b>References:</b>	<i>Ethanol MSDS-022 issued 03/2005CSR</i>
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Approved by: Robert Kimpton			Date: August 2007
Date	Document	Superseded Document	Revision Information
15/08/2007	ALC00822_07	ALC00822_6_MSDS September 2004	General Review; no changes made

END OF MSDS