Material Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER:

Product Name:	Fortron Clean Air Air Conditioning Bulk Liquid
Other Names:	Clean Air Air Conditioning Bulk Liquid Flammable Liquids, N.O.S. FAIRB – 200 litre drum
Recommended Ule:	Removes odours and protects against rapid redevelopment of odours causes.
Supplier:	Fortron Automotive Treatments Pty Ltd 14-18 Sangiorgio Court, Osborne Park Perth, Western Australia 6017 ACN 008 872 197 ABN 12 008 872 197
Phone:	(618) 9202 7800 (Monday – Friday 8.00am – 5.00pm)
Fax:	(618) 9202 7851 www.fortron.com.au
Emergency Telephone No:	0433 088 498

2. HAZARDS INDENTIFICATION:

CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF WORKSAFE AUSTRALIA
DANGEROUS ACCORDING TO THE CRITERIA OF THE ADG CODE

Symbols:	Xn	Harmful
	F	Highly Flammable
Risk Phrases:	R11	Highly Flammable
	R40	Possible risks of irreversible effects
	R66	Repeated exposure may cause skin dryness or cracking
	R20/22	Harmful by inhalation and if swallowed
	R36/38	Irritating to eyes and skin
Safety Phrases:	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 static discharges
	S45	In case of accident or if you feel unwell seek medical advice immediately (show label whenever possible)
	S24/25	Avoid contact with skin and eyes
	S36/37/39	Wear suitable protective clothing/ gloves and eye/face protection
	S2	Keep out of the reach of children

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3. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name	CAS Number	Proportion % v/v
Ethanol	64-17-5	>= 98%
Ingredients determined not to be Hazardous		<= 10%

4. FIRST AID MEASURES:

Swallowed:	If swallowed, **DO NOT** induce vomiting. Transport to nearest medical facility for additional treatment. For advice, contact a Poisons Information Centre. Phone Australia 13 1126; New Zealand 03 4747 000 (Not after May 2005) or 0800 764 766; or a doctor (at once).
Eye:	If contact with the eye(s) occur, immediately hold the eye open and wash continuously for at least 15 minutes with fresh running water. Ensure irrigation under eyelids by occasionally lifting the upper and lower lids. Transport to hospital or doctor without delay. Skilled personnel should only undertake removal of contact lenses after an eye injury.
Skin:	If solids or aerosol mists are deposited upon the skin wash affected areas thoroughly with water and soap if available. Remove any adhering solids with industrial skin cleansing cream. Do not use solvents. Seek medical attention in the event of irritation.
Inhaled:	Remove the source of contamination or move the victim to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing
First Aid Facilities:	Safety shower, mild soap and eye wash facilities.
Advice to Doctor:	Treat as for excess consumption of alcoholic drink.
Additional Information:	None available.

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5. FIRE FIGHTING MEASURES:

Extinguishing Media:	In case of fire use: Alcohol stable foam, water spray or fog. Dry chemical powder, carbon dioxide for small fires only. Do not use water in a jet.
Unusual Fire & Explosion Hazards:	Carbon monoxide and/or Carbon dioxide may be evolved.
Fire Fighting Precautions:	Wear full protective clothing and self-contained breathing apparatus.
Hazchem Code:	Hazchem code 2[Y]E

6. ACCIDENTAL RELEASE MEASURES:

Observe all local and national regulations

Emergency Procedures:	Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Remove all sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers. Take precautionary measure against static discharge. Ensure electrical continuity by bonding and earthing all equipment. Spills can be converted to non-flammable mixtures by dilution with water.
Methods and Materials for Containment and Clean Up:-	
Procedures in case of Breakage or Leakage:	Minor Spill: Clean up spills immediately. (<1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely. Major Spill: (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Retain as contaminated waste. Allow and residues to evaporate or use an appropriate absorbent material and dispose of safely.

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7. HANDLING AND STORAGE:

Precautions for Safe Handling:

Avoid breathing of or contact with material. Use in well ventilated areas. Wash thoroughly after handling. Avoid contact with skin and eyes and clothing. Handle open containers in well ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.
Do not eat, drink or smoke in contaminated areas. Before eating, drinking or smoking, remove contaminated clothing and wash hands. Do not store near strong oxidants.

Conditions for Safe Storage:

Store in original containers in approved flameproof area. Do not store in pits, depressions, basements or areas where vapour may be trapped. No smoking, naked lights, heat or ignition sources.

Keep containers securely sealed.

Do not store near strong oxidants.

Check regularly for spills and leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

National Exposure Standards:

National Occupational Health & Safety Commission (NOHSC) Worksafe Australia has set an exposure standard 1880mg/m^3 (1000ppm) TWA (8hr).

Exposure Standard means the average concentration of a particular substance in the worker's breathing zone, exposure to which, according to current knowledge, should not cause adverse health effects nor cause undue discomfort to nearly all workers. It can be of three forms; time-weighted average (TWA), peak limitation, or short term exposure limit (STEL).

Time-weighted average (TWA) is defined as the concentration of that substance over an eight-hour working shift, and apply to an eight-hour day, for a five-day working week over an entire working lifetime. Short Term Exposure Limits (STEL) and Peak Limitations may also be specified for short periods of exposure such as 15 minutes.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION: - continued

Engineering Controls: Use adequate ventilation to keep the airborne concentrations below the Worksafe exposure standards. If inhalation risk of overexposure exists, wear AS1715/1716 approved respirator – air-purifying type. Correct fit is essential to obtain adequate protection. Keep Container closed when not in use.

Provide adequate ventilation in warehouse or closed storage areas.

Personal Protective Equipment: Respirator Type (AS/NZS 1715 and 1716)
Airborne concentrations should be kept to lowest levels possible. If vapour, mist or dust is generated and the occupational limit of the product or any component of the product, is exceeded, use appropriate AS/NZS1715/1716 approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should be worn when airborne concentration of the contaminant or oxygen content is unknown.

Skin Protection:
No special equipment needed when handling small quantities. Soiled work clothing should be laundered or dry-cleaned.

Eye Protection:
No special eye protection is necessary when handling in small quantities. If eye contact is likely, then it is recommended that safety glasses or goggles be used. Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them.

Hygiene Recommendations: Keep an eye wash fountain available. Keep safety shower available. If clothing is contaminated, remove clothing and thoroughly wash the affected area. Launder contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Colourless / Clear Liquid
Odour:	Alcoholic
pH:	N/A
Vapour Pressure: (mmHg @ 20°C):	44
Vapour Density: (air – 1)	1.59 @ 15 Deg C
Boiling Point: (°C)	78
Freezing/Melting Point: (°C)	-117
Solubility in Water:	Miscible with water
Specific Gravity: (g/ml @ 15°C)	0.79-0.81
Flashpoint:(°C)	13 (Abel)
Explosion/Flammability Limits: (%)	3.5 – 19.0
Auto Ignition Temperature: (°C)	392
Percent Volatiles	100

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10. STABILITY AND REACTIVITY:

Chemical Stability:	Stable under normal use conditions.
Conditions to Avoid:	Avoid naked lights, heat or ignition sources.
Incompatible Materials:	Avoid storage with oxidising agents.
Hazardous Decomposition Products:	On combustion, may emit toxic fumes of carbon monoxide (CO). Other combustion products include carbon dioxide (CO^2).
Hazardous Reactions:	Not determined.

11. TOXICOLOGICAL INFORMATION:

HUMAN HEALTH HAZARDS - ACUTE

Swallowed:	Considered an unlikely route of entry in commercial/industrial environments. Swallowing can cause drunkenness or harmful central nervous system effects. The deliberate ingestion of ethanol (50-100ml) may cause inebriation such that safety is impaired. Effects of a small intake may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, and fatigue. Ingestion of a large amount may lead to severe acute intoxication, tremours, convulsion, loss of consciousness, coma, respiratory arrest and death. Aspiration in to lung may cause pneumonitis.
Eye:	The vapour is irritating to the eyes. The liquid is highly irritating and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.
Skin:	The liquid is irritating to the skin, it is slowly absorbed and is capable of causing skin reactions, which may lead to dermatitis from repeated exposures over long periods. Toxic effects may result from skin absorption. Exposure limits with skin notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation.
Inhaled:	Inhalation of vapours or mists may cause irritation to the respiratory system. Inhalation of the vapour may result in drunkenness (as per effects of swallowing). Early symptoms may occur at airborne levels of 1000 to 5000ppm
Chronic:	Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, gastrointestinal tract and heart muscle.
WARNING:	**Intentional misuse by concentrating/inhaling contents may be fatal.**

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12. ECOLOGICAL INFORMATION:

Ecotoxicity:	Fish:	Expected to be harmful
	Aquatic Invertebrates:	Expected to be harmful
	Algae:	Expected to be toxic
	Microorganisms:	Expected to be Harmful
Persistence and Degradability:	Biodegradable	
Mobility:	Miscible with water	

13. DISPOSAL CONSIDERATIONS:

Disposal Methods and Containers: Consult State Land Management Authority for disposal. Ensure waste disposal conforms to local waste disposal regulations.

14. TRANSPORT INFORMATION:

UN Number:	1170
UN Proper Shipping Name:	Ethanol
Class and Subsidiary Risk:	3
Packaging Group:	II
Hazchem Code:	2[Y]E
Poisons Schedule:	5

Classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Good by Road and Rail

Class 3 – Flammable Liquid

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15. REGULATORY INFORMATION:

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16. OTHER INFORMATION:

Date of Issue:	11 Nov 2008
MSDS Number:	MSDS: 189
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