



Material Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER:

Product Name: **Fortron LONG LIFE COOLANT**

Other Names: **FLLCB – 205 litre drum
FLLC20 – 20 litre container
FLLC5 – 5 litre container (EOL)
FLLC36 – 3.6 litre container**

Recommended Use: Specially formulated for vehicles manufactured in Australia, Japan, Europe, Korea and North America. Fortron Long Life Coolant is an all season type coolant, which has excellent corrosion inhibiting properties to provide maximum protection for your engine.

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 IDENTIFICATION:

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE NOT A DANGEROUS GOODS ACCORDING TO THE CRITERIA OF THE ADG CODE

Hazard Identification: Xn Harmful

Risk Phrase: R22 Harmful if swallowed

Safety Phrase: S20 When using, do not eat or drink
S24/25 Avoid contact with skin and eyes
S2 Keep out of the reach of children

3. COMPOSITION/INFORMATION ON INGREDIENTS:

<u>Hazardous Components</u>	<u>CAS Number</u>	<u>Proportion % w/w</u>
Ethylene Glycol	107-21-1	90-98%

DATE OF ISSUE: 30th July, 2009
DOC No: MSDS.211
ISSUE: B





4. FIRST AID MEASURES:

Swallowed:	If swallowed Do NOT induce vomiting. Have conscious person drink several glasses of water or mil, Seek immediate medical attention. 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. If irritation persists seek medical attention.
Skin:	Remove contaminated clothing and wash skin with plenty of water and soap for at least 15 minutes. Contaminated clothing is to be laundered before re-use. If irritation persists seek medical attention.
Inhaled:	Remove the source of contamination or move the victim to fresh air, avoid becoming a casualty. If rapid recovery does not occur, transport to nearest medical facility for additional treatment. Remove contaminated clothing.
First Aid Facilities:	Potable water should be available to rinse eye or skin. Provide eye baths and safety showers.
Advice to Doctor:	Treat symptomatically.

5. FIRE FIGHTING MEASURES:

Extinguishing Media:	For small fire use dry chemicals, carbon dioxide, water spray or foam. For large fires use water spray, fog. Unsuitable extinguishing media – Do not use water in a jet.
Unusual Fire & Explosion Hazards:	When heated to decomposition, emits acrid smoke and irritating fumes. Not a product presenting risks of explosion. Hazards from combustions products: Carbon dioxide and carbon monoxide.
Fire Fighting Precautions:	Wear full protective clothing and self-contained breathing apparatus.
Hazchem Code:	Not applicable



6. ACCIDENTAL RELEASE MEASURES:

Emergency Procedures: Observe all local and national regulations.

Methods and Materials for Containment and Clean Up:-

Small Spills (< 1 drum) – Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spills (> 1 drum) – Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Dispose of in accordance with regional regulations.

7. HANDLING AND STORAGE:

Precautions for Safe Handling: Avoid contact with eyes, skin and clothing. DO NOT ingest. Avoid breathing dust, keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. 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: Keep container in a cool, well-ventilated area. Avoid all possible sources of ignition. Do not store near strong oxidisers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

National Exposure Standards: In the absence of occupational exposure standards for this product, it is recommended that the following are adopted:-

SUBSTANCE	Occupational Exposure Limits	TWA mg/m ³	STEL mg/m ³
Vapour		60	120

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.

Engineering Controls: Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION: - continued

Personal Protective
Equipment:

Respiratory Protection: wear appropriate respirator when ventilation is inadequate.

Hand Protection: Use solvent resistant gloves. Nitrile for longer term protection or PVC and neoprene for incidental splashes.

Eye Protection: Wear safety goggles. Consult AS1336 and AS/NZS1337 for advice on Industrial Eye Protection.

Clothing Protection: No special protection is ordinarily required beyond standard issue work clothes.

Hygiene Recommendations: Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Red viscous liquid
Odour:	None
pH:	7.5 to 8.5 (1% in water)
Vapour Pressure:	0.06 mmHg @ 20°C
Vapour Density:	2.1 (air = 1)
Boiling Point:	197°C
Freezing/Melting Point:	-13°C
Solubility in Water:	Soluble in water, methanol, diethyl ether
Specific Gravity:	1.115 – 1.145 g/ml @ 15°C
Flashpoint:	116.1°C (closed cup)
Flammability Limits:	LEL 3.2 % UEL 15.3 %
Auto Ignition Temperature:	412°C
Volatile Component:	0%

10. STABILITY AND REACTIVITY:

Chemical Stability:	Stable under normal conditions of use.
Conditions to Avoid:	No additional remark.
Incompatible Materials:	Strong oxidising agents.
Hazardous Decomposition Products:	Burning can produce carbon monoxide and/or carbon dioxide.



11. TOXICOLOGICAL INFORMATION:

HUMAN HEALTH HAZARDS - ACUTE

Swallowed:	Hazardous in case of ingestion.
Eye:	Contact may cause eye irritation.
Skin:	Irritant – prolonged contact may cause dermatitis.
Inhaled:	Inhalation should be minimal since vapours are unlikely due to physical properties. Inhalation may cause irritation to lung.
Chronic:	Toxic to kidneys and liver.
Toxicity to Animals:	Acute oral toxicity (LD50) : 4700mg/kg (rat) Acute dermal toxicity (LD50) : 9530 mg/kg (rabbit)

12. ECOLOGICAL INFORMATION:

Environmental Hazards:	No specific data available.
Ecotoxicity:	No specific data available.
Persistence and Degradability:	Miscible in water.
Mobility:	Biodegradable.

13. DISPOSAL CONSIDERATIONS:

Disposal Methods and containers:	Ensure waste disposal conforms to local waste disposal regulations.
Special Precautions for Landfill or Incineration:	No special precautions required.

14. TRANSPORT INFORMATION:

UN Number:	None Allocated
UN Proper Shipping Name:	None Allocated
Class and Subsidiary Risk:	None Allocated
Packaging Group:	None Allocated
Special Precaution for user:	Poisons Schedule S5
Hazchem Code:	None Allocated

14. TRANSPORT INFORMATION: - continued

Land Transport (ADG):
UN Number: None Allocated
UN Proper Shipping Name: None Allocated
Class and Subsidiary Risk: None Allocated
Packaging Group: None Allocated
Special Precaution for user: Poisons Schedule S5
Hazchem Code: None Allocated

Air Transport (ICAO/IATA):
UN Number: None Allocated
UN Proper Shipping Name: None Allocated
Class and Subsidiary Risk: None Allocated
Packaging Group: None Allocated
Special Precaution for User: Poisons Schedule S5
Hazchem Code: None Allocated

Marine Transport (IMDG/IMO):
UN Number: None Allocated
UN Proper Shipping Name: None Allocated
Class and Subsidiary Risk: None Allocated
Packaging Group: None Allocated
Special Precaution for User: Poisons Schedule S5
Hazchem Code: None Allocated

15. REGULATORY INFORMATION:

CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE

Hazard Identification: Xn Harmful
Risk Phrase: R22 Harmful if swallowed
Safety Phrase: S20 When using, do not eat or drink
S24/25 Avoid contact with skin and eyes
S2 Keep out of the reach of children

16. OTHER INFORMATION:

Date of Issue: 30th July, 2009
MSDS Number: MSDS:211
Issue Number: B

Please Note:

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of Fortron Automotive Treatments Pty Ltd's knowledge; However Fortron Automotive Treatments Pty Ltd makes no warranty whatsoever, expressed or implied, or MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, regarding the accuracy of such data or the results to be obtained from the use thereof. Fortron Automotive Treatments Pty Ltd assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.