

SAFETY DATA SHEET

1. Product and Company Identification

Company Name: Sierra Aust Pty Ltd
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Product Name: **SAF-350 Coolant**
Product Code: 4420, 4421, 4422, 4429, 4430, 4432, 4434
Intended Use: Radiator antifreeze, Coolant
Chemical Nature: Mixture - Liquid

2. Hazards Identification

Hazardous Chemical according to classification by Safe Work Australia
Non-Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

GHS Classification: Acute Toxicity - Oral Category 4



GHS Signal Word: **WARNING**

Hazard Statement: H302 Harmful if swallowed

Precautionary Statements:

General: P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Preventative: P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when using this product

Response: P301 + PP312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P330 Rinse mouth

Storage: P233 Keep container tightly closed.

Disposal: P501 Dispose of contents/container in accordance with local regulations.

3. Composition / Information on Ingredients

Ingredients Names and Proportions

Chemical Entity	Cas Number	Proportion(%)
Ethylene Glycol	107-21-1	<90-98

4. First aid Measures

If Inhaled: Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

In case of skin contact: If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If irritation persists, seek medical attention.

In case of eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists seek medical attention.

If Ingested: If swallowed, do NOT induce vomiting. Have conscious person drink several glasses of water or milk. SEEK IMMEDIATE MEDICAL ATTENTION

Symptoms caused by exposure

Inhalation:	May result in burning sensation of the nose and throat, coughing, and/or difficulty breathing.
Skin:	May include skin burns, redness, swelling and/or blisters
Eyes:	May include burning sensation, redness, swelling and or blurred vision.
Ingestion:	May result in nausea, vomiting abdominal cramps, diarrhea, lumbar pain shortly after ingestion, and possibly narcosis and death. Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow.

Medical attention and special treatment

Treat symptomatically

5. Fire Fighting Measures

Suitable Extinguishing Media: Foam, water spray or fog, dry chemical powder or carbon dioxide. Do not use water in a jet

Specific Hazards arising from the Chemical:

Carbon dioxide and or carbon monoxide may be evolved if incomplete combustion occurs. Material will not burn unless preheated. When heated to decomposition, emits acrid smoke and irritating fumes. Not a product presenting risks of explosion.

Special protective equipment for fire fighters:

Wear full protective clothing and self contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions: Avoid contact with spilled or released material. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Ventilate contaminated area thoroughly.

Environmental Precautions: Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterway using sand, earth or other appropriate barriers.

Methods of cleanup: For small spills (<1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.
For larger spills (>1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

7. Handling and Storage

Precautions for safe handling: Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well ventilated area. Ensure the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage: Store in a cool, well ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidants and corrosives.

8. Exposure Controls and Personal Protection

Exposure Control Measures: From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia Monoethylene Glycol: 52mg/m³ (20ppm) TWA (vapour), 104 mg/m³ (40ppm) STEL (vapour) and 10mg/m³ TWA (particulate)

Biological Monitoring: No biological limit allocated.

Engineering Controls: Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual Protection Measures:

Eye and face protection:	Wear safety goggles.
Skin protection:	Use solvent resistant gloves, nitrile for longer term protection of PVC and neoprene for incidental splashes.
Respiratory protection:	If work practices do not maintain airborne levels below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point >65°C). respirators should comply with AS1716 or an equivalent approved by a state/territory authority.
Thermal Hazards:	Not applicable.

9. Physical and Chemical Properties

Appearance:	Green viscous Liquid	Density (g/ml@15°C):	1.115 – 1.145
Odour:	none	Solubility (kg/m ³):	soluble in water, methanol
Initial Boil point range:	197°C	Auto ignition temp (°C)	412
Flash point:	116.1 °C	Vapour Density:	2.1
Flammability:	Combustible	(air=1@15°C)	
Vapour pressure:	0.06	Upper/lower flammability:	3.2 – 15.3
(mmHg@20°C)		or explosive limits (%)	
		pH:	7.5-8.5 (1% in water)

10. Stability and Reactivity

Reactivity:	Stable under normal conditions of use
Chemical Stability:	Stable under normal conditions of use
Possible Hazardous reactions:	Stable under normal conditions of use
Conditions to avoid:	High temperatures
Incompatible materials:	Strong oxidizing agents, strong acids, strong alkalis
Hazardous Decomposition products:	Burning can produce carbon monoxide and/or carbon dioxide

11. Toxicological Information

Acute toxicity:	Low toxicity in animals; LD50 Oral (rat) = 4700mg/kg LD50 Dermal (rabbit) = 9530mg/kg Note that there is a marked difference in acute oral toxicity between animals and humans, humans being more susceptible than animals. The estimated fatal dose for humans is 100ml
Skin corrosion/irritation:	May cause skin irritation; prolonged contact may cause dermatitis.
Serious eye damage/irritation:	May cause eye irritation
Respiratory or skin sensitisation:	Not expected to be a sensitiser
Germ cell mutagenicity:	No evidence of mutagenic activity
Carcinogenicity:	Not carcinogenic in animal studies
Reproductive toxicity:	Not expected to impair fertility
Specific Target Organ Toxicity (STOT) – single exposure:	May cause drowsiness or dizziness. Inhalation of vapours or mists may cause irritation to the lungs and respiratory system
Specific Target Organ Toxicity (STOT) – repeated exposure:	May cause damage to organs or organ systems through prolonged or repeated exposure. Toxic to liver and kidneys
Aspiration hazard:	No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

Acute toxicity:

Fish –	Low toxicity: LC/EC/IC50 >100mg/l
Aquatic invertebrate –	Low toxicity: LC/EC/IC50 >100mg/l
Algae –	Low toxicity: LC/EC/IC50 >100mg/l
Microorganisms –	Low toxicity: LC/EC/IC50 >100mg/l

Chronic toxicity:

Fish –	NOEC/NOEL >100mg/l
Aquatic invertebrate –	NOEC/NOEL >100mg/l
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Does not bioaccumulate significantly.

Mobility in soil

Dissolves in water. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.

13 Disposal Considerations

Ensure waste disposal conforms to local waste disposal regulations.

14. Transport Information

UN number:	Not applicable
Proper shipping name:	Not applicable
Australian Dangerous Goods class:	Not applicable
Australian Dangerous Goods packing group:	Not applicable
Hazchem code:	Not applicable

15. Regulatory Information

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:	5
Australian Inventory of Chemical Substances (AICS):	Listed
Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):	Not applicable

16. Other Information

This SDS contains only safety related information. For other information see product literature.

Every endeavor has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our products and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control. The information is not intended as an inducement to bargain and no warranty expressed or implied is made as to its accuracy, reliability or completeness. Sierra (Aust) Pty Ltd accepts no liability for loss, injury or damage arising from reliance upon the information contained in this data sheet except in conjunction with the proper use of the product to which it refers. Due care should be taken that the use and disposal of this product is in compliance with appropriate Federal, State and Local Government regulations.