



MATERIAL SAFETY DATA SHEET

Donaldson Thermo-Tech EG Heavy-Duty Coolant Concentrate

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Donaldson Thermo-Tech EG Heavy Duty Coolant Concentrate

Part Numbers: P903104 - 20L
P903105 - 205L

Company: Donaldson Australasia Pty Ltd ABN: 78 000 521 200
Address: 1 Lucca Road, Wyong, NSW, 2259
Phone: 1800 FILTER (345 837) Fax: (02) 4351 2036
Emergency Telephone Number: 0419 885 862 Day, After Hours 1300 131 001

Emergency Telephone Number New Zealand: 0800 764 766

Other Name: Glycol Coolant, Antifreeze
Manufacturer's Product Code: 19000
Recommended Use: Radiator Antifreeze, Coolant

SECTION 2: HAZARD IDENTIFICATION

Non-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
Signal Word **WARNING**

Hazardous chemical classification

Acute toxicity - Oral, Category 4

Pictogram



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

SECTION 2: HAZARD IDENTIFICATION - Continued

Preventative	
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product
Response	
P301 + P312	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell
P330	Rinse mouth
Disposal	
P501	Dispose of contents/container in accordance with local regulations

SECTION 3: COMPOSITION & INFORMATION ON INGREDIENTS

Hazardous Ingredients

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

SECTION 4: FIRST AID MEASURES

FIRST AID TREATMENT

Description of necessary first aid measures

- Inhalation:** 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.
- 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.
- Eye contact:** If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists, seek medical advice.
- Ingestion:** 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 include a temporary burning sensation of the nose and throat, coughing and/or difficulty breathing
- Skin:** May include burning sensation, redness, swelling and/or blisters
- Eye:** May include burning sensation, redness, swelling and/or blurred vision
- Ingestion:** May include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Kidney toxicity may be recognised by blood in the urine or increased or decreased urine flow.

Medical attention and special treatment

Treat symptomatically

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing equipment	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. 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 and precautions for fire fighters	Wear full protective clothing and self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Avoid contact with spilled or released material. Do NOT ingest. 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 waterways using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up:

For small spills (< 1 drum), transfer by mechanical means to be labelled, 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.

SECTION 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 that the workplace is well ventilated such that Occupational Exposure limit is not exceeded. Do not empty into drains.

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

SECTION 8: EXPOSURE CONTROLS PERSONAL PROTECTION

Exposure control measures: From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia - Monoethylene glycol: 52mg/m³ (20ppm) TWA (vapour), 104,g/m³ (40ppm) STEL (vapour) and 10mg/m³TWA (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 or PVC and neoprene for incidental splashes.

Respiratory protection: If work practices do not maintain airborne level 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

SECTION 9: IDENTIFICATION

PHYSICAL DESCRIPTION / CHEMICAL PROPERTIES

Appearance	Green viscous liquid
Odour	None
Odour threshold (ppm)	Data not available
pH	90 - 11.0 (1% in water)
Melting point/freezing point (°C)	-13
Initial boiling point and boiling range (°C)	197
Flash point (°C)	116.1 (closed cup)
Evaporation rate (Butyl acetate =1)	0.01
Flammability	Combustible
Upper/lower flammability or explosive limits (%)	3.2 - 15.3
Vapour pressure (mmHg @ 20°C)	0.06
Vapour density (air=1)	2.1
Density (g/ml @ 15°C)	1.115 - 1.145
Solubility	Soluble in water, methanol, diethyl ether
Partition coefficient: n-octanol/water	Data not available
Auto-ignition temperature (°C)	412
Decomposition temperature (°C)	Data not available
Kinematic viscosity (mm ² /s @ 20°C)	Data not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions of use.
Chemical Stability	Stable under normal conditions of use
Possibility of hazardous reactions	Stable under normal conditions of use
Conditions to avoid	High temperatures
Incompatible materials	Strong oxidising agents, strong acids, strong alkalis
Hazardous decomposition products	Burning can produce carbon monoxide and/or carbon dioxide

SECTION 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 in 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	Not considered an aspiration hazard

SECTION 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

Other adverse effects

Data not available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods: Ensure waster disposal conforms to local waste disposal regulations.

SECTION 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

SECTION 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

SECTION 16: OTHER INFORMATION

Further information may be obtained by contacting Donaldson Australasia Pty Ltd 1800 FILTER (345 837)

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Changes in this revision:	Update to GHS SDS standard

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