

MATERIAL SAFETY DATA SHEET

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: JOHN DEERE COOL GARD II LONG LIFE ANTIFREEZE/ANTIBOIL COOLANT 30/70 PREMIX

Company:Recochem Engine Coolants (Tianjin) Co., LtdAddress:No.5 Factory Building, Chuang Ye Road South, Hai Fang Road, Standard Factory Park, Nan Gang IndustrialArea, Bin Hai New Area, Tianjin, ChinaPhone:86-022-63116148Fax: 86-022-63117175Other Names:Glycol Coolant, AntifreezeManufacturer's Product Code:TBARecommended Use:Radiator Antifreeze, Coolant

SECTION 2 HAZARDS IDENTIFICATION

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

Symbol:Xn - HarmfulRisk Phrases:R22 - Harmful if swallowedSafety Phrases:S2 - Keep out of the reach of children

SECTION 3	COMPOSITION / INFORMATION	ON INGREDIENTS				
Hazardous Ingredients						
Chamical Enti	ty.	CAS Number	Proportion $(0/2)$			

Chemical Entity	CAS Number	Proportion (%)
Ethylene Glycol	107-21-1	25 - 35

SECTION 4 FIRST AID MEASURES

FIRST AID TREATMENT

- Swallowed: If swallowed, do NOT induce vomiting. Have conscious person drink several glasses of water or milk. SEEK IMMEDIATE MEDICAL ATTENTION.
- **Eve:** If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists seek medical attention.
- **Skin:** If skin contact occurs, wash skin thoroughly with water and follow by washing with soap if available. If irritation persists, seek medical attention.
- **Inhaled:** Remove victim from exposure if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

<u>First Aid facilities:</u> Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers. **<u>Advice to Doctor:</u>** Treat symptomatically. **<u>Additional Information:</u>** None available.

SECTION 5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: For a small fire use dry chemicals, carbon dioxide, water spray or foam. For large fires use water spray or fog. Do not use water jet.

Hazards from combustion products: Carbon dioxide and carbon monoxide.

<u>Precautions for Fire Fighters and Special Protective Equipment:</u> Wear full protective clothing and self-contained breathing apparatus.

Additional Information: When heated to decomposition, emits acrid smoke and irritating fumes. Not a product presenting risks of explosion.

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SECTION 6 ACCIDENTAL RELEASE MEASURES

Observe all local and national regulations.

Spills and Disposal, Methods and Materials for Containment and Clean Up Procedures: For small spills, dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. For large spills, absorb with an inert material and put the spilled material in an appropriate waste disposal container. Dispose of in accordance with regional regulations.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling and Storage: Avoid contact with eyes, skin and clothing. DO NOT ingest. Avoid breathing vapour and mist, keep container closed. Keep container in a cool, well-ventilated area, away from strong oxidisers, and use only with adequate ventilation. Avoid all possible sources of ignition. Wash thoroughly after handling. Before eating, drinking or smoking, remove contaminated clothing. Do not eat, drink or smoke in contaminated areas.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: National Occupational Health & Safety Commission (NOHSC) Worksafe Australia has set an exposure standard of 52mg/m3 (20ppm) TWA (vapour), 104mg/m3 (40ppm) STEL (vapour) and 10mg/m3 TWA (particulate). **Biological Limit Values:** No biological limit allocated.

Personal Protective Equipment:

Respiratory Protection: Wear appropriate respirator when ventilation is inadequate.

Hand Protection: Use solvent resistant gloves (nitrile, PVC or neoprene).

Eye Protection: Wear safety goggles.

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

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION / CHEMICAL PROPERTIES

Appearance	Orange viscous liquid
Odour	None
pH:	7.5 to 8.5 (1% in water)
Vapour Pressure (mmHg @ 20°C):	0.06
Vapour Density (air $= 1$)	2.1
Boiling Point (°C):	104 - 5
Freezing/Melting Point (°C):	-16
Solubility in Water	Soluble in water, methanol, diethyl ether
Specific Gravity (g/ml @ 20°C):	1.04 - 1.065
Flashpoint (°C):	N/A
Flammability Limits (%):	N/A
Auto Ignition Temperature (°C):	N/A
Percent Volatiles	0

SECTION 10 STABILITY AND REACTIVITY

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

SECTION 11 TOXICOLOGICAL INFORMATION

HEALTH EFFECTS

Acute: Swallowed: Eve: Contact may cause eye irritation. Skin: Irritant – prolonged contact may cause dermatitis.

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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).

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Fish	: Low toxicity: LC/EC/IC50 > 100mg/l			
Aquatic Invertebrates	: Low toxicity: LC/EC/IC50 > 100mg/l			
Algae	: Low toxicity: LC/EC/IC50 > 100mg/l			
Microorganisms	: Low toxicity: LC/EC/IC50 > 100mg/l			
Mobility: Miscible with water.				
Persistance/degradability: Biodegradable.				

SECTION 13 DISPOSAL CONSIDERATIONS

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

SECTION 14 TRANSPORT INFORMATION

UN Number:	N
Class:	N
Packing Group:	N
Special Precautions	N
for User:	

Non Regulated V/A V/A None

SECTION 15 REGULATORY INFORMATION

Poisons Schedule : 5 AICS : Listed Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76:2010) : N/A

SECTION 16 OTHER INFORMATION

Further Information may be obtained by contacting Recochem on (07) 3308 5200

The information sourced for the preparation of this document was correct and complete at the time or writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product.

Proper Shipping Name:

Subsidiary Risk:

Hazchem Code:

N/A

N/A

N/A