

# TREBLEX

Solutions for industry

## PRODUCT DATA SHEET

Code: TGHDRU

## GUARDIAN LONG LIFE RTU COOLANT

### DESCRIPTION

*TREBLEX RTU GUARDIAN* was designed to generally exceed the broad range of national, international and OEM standards so workshops can SAVE MONEY by having one coolant to do a wide range of vehicles. (Ref Standards list) *GUARDIAN* is recommended for all general aftermarket servicing the trucking, mining, transport and general automotive industries.

*GUARDIAN* has a maximum service life of 4 years, 1,000,000km, 12000 hours or whichever comes first in a well maintained engine cooling circuit at 50% v/v.

Treblex advises against indiscriminate mixing of different coolant formulations. Mixing different coolants may cause precipitation of inhibitor components and potentially result in overheating and reduced corrosion protection.

*GUARDIAN* provides maximum antifreeze / anti boil protection and provides peak reliability and operation life of the water pump because it is silicate free. It also provides premium cavitation and liner pitting protection maximising protection of all metals commonly found in the engine cooling system. It contains 1010g/L of Mono ethylene Glycol.

*GUARDIAN* is a superior general-purpose coolant based on Organic Additive Technology (OAT), which is a selectively balanced mixture of organic additives. OAT formulations are longer life products than those based on conventional formulations, making OATs the products of choice for general after market servicing.

*GUARDIAN* is suitable for engines of both ferrous and aluminium alloy construction, under both light and heavy duty cycle operation.

*GUARDIAN* is compatible with aluminium or copper/brass and mixed aluminium, copper/brass cooling circuits. It is a formulation based on monoethylene glycol and is free of nitrite, phosphate and amine based inhibitors.

*GUARDIAN* is produced as a green liquid. Bittering agents are deliberately added, to reduce the risk of accidental poisoning by ingestion.

*GUARDIAN* provides long life protection against scale, rust and residue build up. It allows maximum fuel economy by performing at the desired engine operation temperature.

### USE

*GUARDIAN* should be used in conjunction with the recommendation by the vehicle manufacturer. In the absence of such guidance, it should be diluted with good quality water to give solutions in the concentration of 50 % v/v for maximum protection.

### SAFETY

*GUARDIAN* contains ethylene glycol and is poisonous if swallowed. Read Material Safety Data Sheet before use. Avoid contact with the skin and eyes. Keep out of reach of children.

Package sizes:20L and 200L

SAFETY: Please read SDS sheet before use. Keep out of reach of children.

Information contained herein is accurate at the time of writing this document. However specifications change from time to time, please ensure that the specifications meet your requirements.

Treblex Industrial Pty Ltd : U1/26 ilda Rd, Canning Vale, WA, 6155 — Ph: 08 9456 5825

Email: [sales@treblex.com.au](mailto:sales@treblex.com.au)

Website: [www.treblex.com.au](http://www.treblex.com.au)

# TREBLEX

Solutions for industry

## PRODUCT DATA SHEET

### GUARDIAN LONG LIFE RTU COOLANT

#### SPECIFICATIONS / STANDARDS

*GUARDIAN* meets or exceeds the performance characteristics of the following engine coolant specifications for a fully formulated antifreeze:

<b>OEM</b>	<b>Specifications</b>
ASTM	D-3306/D-4985/D-6210
AS/NZS	AS 2108-2004 Type A
JIS	K2234
Caterpillar	EC 1
Cummins	SB 3666132
Cummins	CES 14603
Detroit Diesel Corp	Bulletin # 7SE 298, 93K217
GM	6277M/1825M/1899M, GM Heavy Truck
John Deere	JDM HD24
MAN	324
Massey Ferguson	D- 4985 / D-3306
Mack	ASTM D4985, Heavy Truck
Mercedes-Benz	DBL 325
MTU	(EVP 1 1827/MTL 5048)
SAE	J 1034 / J1941
Saab- Scania	6901
Daimler Chrysler	MS 7170, MS 9769
Ford	ESE-M97B44A, ESE-M97B18-C
Ford	Wss-M97B51-A1
Freightliner	48-2288D Hyundai
Kenworth	RO26-170-97
Landrover	-
New Holland	WSN-M97B18-D
Paccar- Kenworth	-
Peterbilt	8502.002
Perkins	-
Toyota	-
Volvo	Heavy Truck
White Star	-
US Federal	A-A-870-A
TMC	RP 329

Package sizes:20L and 200L

Code: TRTUGHD

SAFETY: Please read SDS sheet before use. Keep out of reach of children.

Information contained herein is accurate at the time of writing this document. However specifications change from time to time, please ensure that the specifications meet your requirements.

Treblex Industrial Pty Ltd : U1/26 ilda Rd, Canning Vale, WA, 6155 — Ph: 08 9456 5825

Email: [sales@treblex.com.au](mailto:sales@treblex.com.au) Website: [www.treblex.com.au](http://www.treblex.com.au)

# TREBLEX

Solutions for industry

---

## PRODUCT DATA SHEET

### GUARDIAN LONG LIFE RTU COOLANT

#### PROPERTIES

- pH (50% v/v in water) : 7.5 - 9
- Silicon: < 1
- Boiling Point (neat) : 176 degrees C
- Freezing Point - 50% v/v in water : -34 degrees C  
- 30% v/v in water : -15 degrees C
- Foaming –volume : 45 mls
- Foaming -break time : 2 seconds
- Bittering Agent : 10 ppm
- Density : 1.125 g/ml at 20 degrees C
- Flash Point (open cup) : 118 degrees C

Package sizes:20L and 200L

Code: TRTUGHD

SAFETY: Please read SDS sheet before use. Keep out of reach of children.

Information contained herein is accurate at the time of writing this document. However specifications change from time to time, please ensure that the specifications meet your requirements.

**Treblex Industrial Pty Ltd : U1/26 ilda Rd, Canning Vale, WA, 6155 — Ph: 08 9456 5825**

**Email: [sales@treblex.com.au](mailto:sales@treblex.com.au) Website: [www.treblex.com.au](http://www.treblex.com.au)**

# TREBLEX

Solutions for industry

## PRODUCT DATA SHEET

# GUARDIAN LONG LIFE RTU COOLANT

### TEST DATA

It exceeds the performance requirements of the following standards when assessed in hard water :

- \* ASTM D1384 " Corrosion Test for Engine Coolants in Glassware."
- \* ASTM D4340 "Corrosion of Cast Aluminium Alloys in Engine Coolants Under Heat Rejecting Conditions."
- \* ASTM D2570 "Simulated Service Corrosion Test for Engine Coolants."
- \* ASTM D2809 "Cavitation Corrosion and Erosion Corrosion Characteristics of Aluminium Pumps With Engine Coolants."
- \* Australian/New Zealand Standard 2108.1:2004 "Engine Coolants Type A and Type B for Engine Cooling Systems."

### TEST RESULTS (typical)

#### 1. Glassware Corrosion : ASTM D1384

Maximum Allowable Weight Change (mg)

No evidence of pitting or other corrosion.

	AS 2108	ASTM	BS 6560	GM 1825M	GM 6277M	CAT.EC1	Result
Copper	10	10	10	10	10	10	1
Solder	15	30	15	20	20	15	2
Brass	10	10	10	10	10	10	1
Mild Steel	10	10	10	10	10	10	1
Cast Iron	10	10	10	10	10	10	1
Cast Aluminium	15	30	15	20	20	20	2

#### 2. Heat-stressed Alloy Corrosion : ASTM D4340

Heat Transfer Corrosion Rate : 0.3 mg/cm<sup>2</sup>/week  
Max allowable corrosion : 1.0 mg/cm<sup>2</sup>/week  
Crevice/pitting Attack : None

Package sizes:20L and 200L

Code: TRTUGHD

SAFETY: Please read SDS sheet before use. Keep out of reach of children.

Information contained herein is accurate at the time of writing this document. However specifications change from time to time, please ensure that the specifications meet your requirements.

Treblex Industrial Pty Ltd : U1/26 ilda Rd, Canning Vale, WA, 6155 — Ph: 08 9456 5825

Email: [sales@treblex.com.au](mailto:sales@treblex.com.au) Website: [www.treblex.com.au](http://www.treblex.com.au)

# TREBLEX

Solutions for industry

## PRODUCT DATA SHEET

### GUARDIAN LONG LIFE RTU COOLANT

#### Simulated Service : ASTM D 2570

	Maximum Allowable Mass Change (mg)		<i>GUARDIAN</i>
	AS 2108	ASTM D3306	Avg
Copper	20	20	-0.3
Solder	30	60	-1.5
Brass	20	20	-0.4
Steel	20	20	1.8
Cast Iron	20	20	-2.8
Cast Aluminium	30	60	-2.5

Test performed at 50% (v/v) in hard water.

#### Cavitation Corrosion : ASTM D 2809

Corrosion Rating 9

No cavitation damage evident.

Package sizes:20L and 200L

Code: TRTUGHD

SAFETY: Please read SDS sheet before use. Keep out of reach of children.

Information contained herein is accurate at the time of writing this document. However specifications change from time to time, please ensure that the specifications meet your requirements.

Treblex Industrial Pty Ltd : U1/26 ilda Rd, Canning Vale, WA, 6155 — Ph: 08 9456 5825

Email: [sales@treblex.com.au](mailto:sales@treblex.com.au) Website: [www.treblex.com.au](http://www.treblex.com.au)