Red Premium Long Life Coolant Premix (RLLTU)

Nulon Red Premium Long Life Coolant Premix (RLLTU) is a pre-diluted, read- to-use 50/50 mix of Nulon Red Concentrated Long Life Coolant (RLL) and demineralised water. RLLTU is formulated to be used in either of two ways:

1. Add as a top-up to any cooling system that contains Red Premium Long Life Coolant 100% Concentrate (RLL). Or, use to top-up any cooling system known to contain the following products:

- Holden Extended Life Anti-Freeze Coolant
- Ford Long Life Anti-Freeze Anti-Boil Concentrate
- Dex-Cool®
- PrixMax MEG95

2. Use as a complete fill product. This is particularly advantageous in areas where water is of poor quality, or is very hard, such as Perth and Adelaide.

All performance characteristics of Nulon Red Premium Long Life Coolant Premix (RLLTU) are exactly the same as for Nulon Red Coolant 100% Concentrate (RLL) when RLL is mixed 50/50 with demineralised water.

RLLTU provides the ultimate anti-freeze/anti-boil and corrosion protection for all late model vehicles, including petrol, diesel and heavy duty diesel applications. RLLTU incorporates the most up to date Organic Additive Technology (OAT) carboxylate corrosion inhibitors. RLLTU is nitrite and amine free to meet US requirements, phosphate free to meet European requirements and silicate free to meet Japanese requirements. Nulon RLLTU's carboxylate inhibitor package is more stable and stays in solution better than traditional coolants. This provides an extended shelf life of 8 years. Nulon RLLTU will not form solids inside cooling systems, or become abrasive to water pump seals. All of this means that RLLTU provides maximum corrosion and anti-freeze, anti-boil protection for up to 8 years or 500,000 km, (whichever comes first).

Nulon RLLTU is the preferred coolant to use in systems fitted with aluminium radiators. It is a genuine 100% OAT based, long life coolant. RLLTU is dyed its distinct red/orange colour to instantly distinguish its unique chemistry from traditional green coolants. It should not be mixed with other coolants.

Nulon RLLTU provides maximum protection against cavitation erosion of wet cylinder liners in diesel engines. Nulon RLLTU is not recommended for use in cooling systems that have a copper/brass radiator (in such vehicles, use Nulon LL, which is green). If changing from any other coolant to RLLTU, always thoroughly flush the system first, as cross contamination will reduce the life of RLLTU.

Applications:

Nulon RLLTU is recommended for use in all vehicles that use a red or orange coloured coolant. Nulon RLLTU is principally designed for use where OAT coolant is required. Use RLLTU where AS/NZS 2108.1:2004 Type A, GM6277M or Toyota TSK2601G specifications are cited. Use in all cooling systems as a replacement for any red/orange coloured coolant. Among specific makes of vehicles that use red/orange coolant are Ford Falcon EA - EF, Holden Gen 3 & Gen 4 V8's and Alloytech V6, all Toyota models, Audi (some models), VW (some models), Jeep (most models), Chrysler (most new imports have red), Isuzu trucks, Daihatsu cars and trucks and Caterpillar.

Recommended step-by-step guide for changing Nulon RLLTU coolant.

1. Before proceeding, read your owner's manual as some vehicles may have special requirements.
2. Check that all hose connections are tight. Also check the condition of all hoses, fittings and belts.
3. Use Nulon Radiator Flush and Clean (R40) to ensure that the radiator and engine are as clean as possible. This ensures maximum coolant life.
4. R40 should be added to the old coolant. With the heater on, run the engine, or drive for 20 minutes minimum or 1 hour maximum.
5. Stop the engine and allow it to cool. Remove the bottom radiator hose or drain plug to drain out all the old coolant. It is important to rinse out all traces of old coolant from the engine block and heater circuit. To best achieve this, refill the system with clean water, then run the engine up to operating temperature and when it is cool drain and flush again. This will ensure a clean environment for the new coolant.
6. Fill the system completely with Nulon RLLTU.
7. Some vehicles may require "air bleeding" to remove trapped air from the heater circuit and cylinder head. An air bleeding screw is located on the engine of some vehicles for this purpose. If you are unsure about this procedure please seek further advice before proceeding. Removing the return heater hose from the water pump to establish water flow, whilst topping up, will assist in reducing "air locks". Note: air locks can cause severe engine damage.
8. Start the engine and monitor coolant level and temperature until the thermostat opens and the vehicle reaches operating temperature.
9. When the vehicle cools down re-check the coolant level.

Note: This check sheet should be used as a guide only. Some vehicles may have special requirements that are not noted above. We strongly advise that you read your owner's manual or relevant workshop manual before proceeding with a coolant change.

Physical Properties

Property	Nulon R LLTU
Density (g/ml at 20°C)	1.069
Freezing Point °C	-37
Boiling Point °C	111
Reserve Alkalinity (ml)	2.5
Glycol content (g/litre)	1060
pH (50% v/v in water)	8.5
Coolant hose test	Pass
Foaming, Height, (ml) Break Time, (sec)	45 max 2
Chloride Ion (mg/L)	<10
Colour	Red/orange
Glycol content (g/litre)	520
Shelf life	5 years

Temperature protection chart (using105 kPa radiator cap)	
Boils at	127°C
Freezes at	-37°C

Glassware Corrosion Test (ASTM D 1384)

Metal	AS/NZS 2108.1:2004 wt. loss mg (max)	Typical result for Nulon RLLTU
Copper	10	2

Solder	15	+2
Brass	10	2
Steel	10	+1
Cast iron	10	+3
Cast aluminium	15	4

Simulated Service Test (ASTM D 2570)

Metal	AS/NZS 2108.1:2004 wt. loss mg (max)	Typical result for Nulon RLLTU
Copper	20 (max wt. loss)	5
Solder	60	+1 (gain)
Brass	20	4
Steel	20	1
Cast iron	20	+2 (gain)
Aluminium	60	1

Water Pump Cavitation Erosion Test (ASTM D 2809)

Metal	GM 1825M (rating)	ASTM D 3306(rating)	Typical result for Nulon RLLTU
Cast aluminium	8 min	8 min	9

Aluminium Heat Rejection Corrosion Test (ASTM D 4340)

Nulon RRLTU Corrosion rate (mg/cm2/week)	AS/NZS 21008.1:2004(max allowable rate, mg/cm2/week)
0	1.0

Safety Directions

SAFETY: Harmful if swallowed. May cause respiratory irritation. Use only outdoors or in a well-ventilated area. Store locked up.

FIRST AID: IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor (at once).

ENVIRONMENT: Do not pollute drains, soil or water with used products. After use, dispose of container in a responsible manner. Disposal of container should comply with local council regulations.

Meets or exceeds the following oil industry specifications	
AS Claims	AS 2108-2004 Type A
ASTM	ASTM D1384, ASTM D2570, ASTM D2809, ASTM D3306, ASTM D4340, ASTM D4656, ASTM D4985, ASTM D5345
BMW	BMW (UK)
Chrysler	Daimler Chrysler MS-9769
Ford	ESE M97-B18C, ESE M97-B44A, WSS-M97B44-D
GM	GM 1825M, GM 1899M, GM 6277M
Madza	Mazda MES MN 121D
Mitsubishi	Mitsubishi ES-X64217
Nissan	Nissan NES M 5509
Other Claims	BS 6580:1992, JIS K2234 (Japan)
Saab	SAAB FSD 8704
Society of Automotive Engineers	SAE J1034
Toyota	Toyota K2601G
Volvo	Volvo (UK)

Pack Sizes

Meets or exceeds the following oil industry specifications

Part No: RLLTU1
1 Litre - 12 per carton
Barcode: 9311090001008

Part No: RLLTU5
5 litres - 3 Per Carton
Barcode: 9311090000797