

LAUNCHER ANTIFREEZE COOLANT

PREMIUM CONCENTRATED ANTIFREEZE/COOLANT

LAUNCHER Premium Antifreeze/Coolant is an undiluted fully formulated long-life heavy-duty ethylene glycol Antifreeze/Coolant with anti-corrosion inhibitors. It offers total and permanent protection of the cooling system. It contains no nitrates, phosphates, or amines.



Version: LL/TDS/PAC/V1/02-01-2023

APPLICATIONS

LAUNCHER Premium Antifreeze/Coolant is designed for use in cooling circuits of the open or closed type (vehicles and heating). Suitable for automotive and heavy-duty petrol and diesel engines found in on-road, off-road, marine, farm, mining and construction equipment. Dilute with demineralized water.

PERFORMANCE FEATURES AND BENEFITS

- Anti-corrosion inhibitors.
- Provides freeze protection more than -52°C and boil over protection more than 129°C.
- · Amine and phosphate free.
- A clean cooling system with protection from sludge and scale deposits.

PROPERTIES

LAUNCHER Premium Antifreeze/Coolant is a hybrid antifreeze, containing the combination of organic additive technology inhibitors boosted with borate, nitrite, nitrate, molybdate and silicate inorganic corrosion inhibitors. It is a low silicate, phosphate and amine free Antifreeze/Coolant suitable for heavy-duty applications without supplemental coolant additives.

- Typically provides five years, or 240,000 kilometers service.
- Miscible and compatible with other engine Antifreeze/Coolant.
- Low silicate level also provides aluminium compatibility.
- Protection against frost.
- Protection against cavitation's corrosion.
- Effective engine cooling without boiling.

FILLING INSTRUCTIONS:

Diluted with clean water (preferably de mineralized) to a concentration of between 30% that ensures satisfactory protection against corrosion for light vehicles and 50% which is the recommended concentration to achieve the best degree of protection performance for larger diesel engines. In a clean cooling system, LAUNCHER Premium Antifreeze/Coolant will deliver optimum performance and protection for up to one year upon which the system should be drained and refilled. When topping –up system use Antifreeze/Coolant diluted with the appropriate amount of water.

> RECOMMENDATIONS / SPECIFICATIONS

MEETS OR EXCEEDS:

ASTM D3306,D4985, D6210 AFNOR 15-601/1991, BS 6580-1992, SAE: J1034, US Fed: A-A-870-A. AS/NZ: 2108.1:1997 'Type A', Caterpillar: EC-1 (sections 2.3–4.5 included), Cummins: Bulletin 3666132, JLS: K 2234, Volvo, Daimler Chrysler: MS 9769, Detroit Diesel: 7SE298; 93K217, Freightliner: 48-22880, General Motors: 1825M, 1899M, Heavy Truck, John Deere: JDM H24, Kenworth: RO26-170-97, MACK Truck: 014GS17004, MAN: 324, Merecedes-Benz: DBL 7700, MTU: MTL 5048, PACCAR: CSO185, Scania: TB1451, TMC: RP 329, Daimler Chrysler: MS 7170, Ford: ESE-M97B44-A, Scania: 6901, ESE-M97B18-C, John Deere: HD 24, International (IT&E): CEMS B-1, New Holland: WSN-M97B18-D, Peterbilt: 8502.002.

TYPICAL TECHNICAL PROPERTIES

CHARACTERISTICS	
Product code	LMOAFC100
Specific Gravity 15.6°C (ASTM D 1122), g/mL	1.13
pH (ASTM D 1287)	8.5
Freeze Point 50% volume (ASTM D 1177), °C	-38
Reserve Alkalinity ml (ASTM D 112), (min.)	6.0
Flash Point(COC), ASTM D92, (min), °C	116

TYPICAL FREEZE/BOILOVER PROETCTION MIXING CHART

(Using a103.4kPa pressure cap)

Mixi	ng Ratio	Freezing Point	Boil Over
Antifreeze concentrate (%)	Demineralized water (%)	Protection (°C)	Protection (°C)
40	60	-24.4	+106.7
50	50	-38	+129
60	40	-52	+132

Note: These characteristics are typical of current production. While future production will conform to LAUNCHER'S specification, variations in these characteristics may occur.



Health and Safety: This lubricant, when used in accordance with our recommendations and for the application for which it is intended, does not constitute any special hazard. A safety data file conforming to the requirements of current EC legislation is available from your local trade consultant