



PULZAR SUPER COOLANT

PRE-MIXED RADIATOR COOLANT FOR UNIVERSAL FORMULA-GASOLINE OR DIESEL

Product Descriptions

PULZAR SUPER COOLANT is a premium quality, single phase, and ethylene glycol-base product. It provides year-round protection of the cooling system. Pulzar super coolant is used as a cooling and heat transferring fluid in combustion engines. Excessive heat is transferred via the fluid to the radiator where the mixture is cooled by means of airflow. Pulzar super coolant is an ethylene glycol based fluid that provides maintenance-free protection against freezing and boiling but also against corrosion. Extended coolant life, often for the whole life of the engine or vehicle, is obtained through the use of virtually non-depleting corrosion inhibitors.

PULZAR SUPER COOLANT based on patented silicate-free aliphatic additive technology, Pulzar super coolant provides long-life corrosion protection for all engine metals, including aluminium and ferrous alloys. During extensive fleet testing, the synergistic combination of mono- and di-carboxylates present in this coolant, has proven to provide protection for at least 650,000 km (ca. 8,000 hours) in truck & bus-application or 250,000 km (ca. 2,000 hours) for passenger cars or 32,000 hours (or 6 years) for stationary engines. Pulzar super coolant is recommended to change the coolant every five years or at above mileages or operating times, whichever comes first. Pulzar super coolant provides long-life protection against all forms of corrosion by the

use of optimized and patented organic corrosion inhibitors. Excellent and lasting high temperature corrosion protection is provided for the aluminium heat transfer surfaces contained in modern engines. The inhibitor package of Pulzar super coolant offers excellent cavitation protection even without using nitrite or nitrite-based supplemental coolant additives (SCA's).

Application

PULZAR SUPER COOLANT is recommended for automotive and trucks cooling systems. **PULZAR SUPER COOLANT** in the radiator. Recheck coolant levels occasionally and replenish as required.

PULZAR SUPER COOLANT meets the performance requirements of the following industry specifications or performance requirements:

- Ford specification WSS-M97B44-D
- Mercedes-Benz specification 325.3
- General Motors specification GM 6277M
- MAN specification 324 type SNF
- Volkswagen specification TL 774F

PULZAR SUPER COOLANT is suitable for use as antifreeze / coolant in any combustion engine. See the OEM's manual on recommended coolant type.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES PULZAR SUPER COOLANT

Test	METHOD	TYPICAL RESULTS
Foaming properties at 88°C - break time	ASTM D-1881	50 ml 5 sec
pH (33% Solution)	ASTM D-1287	8.3
Reserve alkalinity (pH 5.5)	ASTM D-1121	2.1
Refractive Index, 20°C	ASTM D-1218	1.369
Initial crystallization	ASTM D-1177	-18 °C
Freezing protection	ASTM D-1120	-20 °C
Specific gravity, 20°C	ASTM D-5931	1.053
Equilibrium boiling point	ASTM D-1120	104 °C
Effect on non-metals	GME60 255	No effect
Staining characteristics	ASTM D-1882	No effect

