Technical Data Sheet

Shell **Coolant Premium MV**

Pre-diluted Hybrid Organic Additive Technology Coolant / Antifreeze

Shell Coolant Premium MV is a fully formulated extended life heavy duty ethylene glycol antifreeze coolant. The product is a hybrid coolant, 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-free, and amine-free coolant. It is suitable for heavy duty applications without supplemental coolant additives (SCAs) during the initial fill. Shell Coolant Premium MV is Ready-to-Use. It requires no further dilution.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Protection against low temperature freeze-up or high temperature boil-over**

  Shell Coolant Premium MV provides freeze protection to -37^{0}C and boil-over protection up to 132^{0}C (with the use of a 100 kPa pressure cap).

- **Extended life capability**

  Shell Coolant Premium MV typically provides 5 years or 240,000 km in automotive service (whichever comes first).

- Shell Coolant Premium MV provides up to 960,000 km, 12,000 hours or 6 years in heavy duty applications under normal operating conditions provided the coolant is frequently checked and kept in good condition with nitrite levels in line with the engine OEM's requirements.

- **Field Compatibility**

  Shell Coolant Premium MV is recommended for use where an extended service interval is required. It does not require a charge of SCA or coolant extender at initial fill; however, it is compatible with both. Its compatibility extends to use with other similarly formulated extended life low-silicate, nitrite-containing hybrid antifreeze/ coolants.

Main Applications

- **Heavy duty gasoline or diesel engine antifreeze**

  Shell Coolant Premium MV is an amine and phosphate free fully formulated extended life engine coolant suitable for automotive and heavy duty gasoline and diesel engines found in on-road, off-road, marine, farm, mining and construction equipment.

- Shell Coolant Premium MV contains organic additive technology corrosion inhibitors as well as inorganic corrosion inhibitors, borate, molybdenum, nitrite, nitrate and silicate. This product does not require a charge of supplemental coolant additives (SCAs) during the initial fill or if the system is drained and fully charged with new Shell Coolant Premium MV. It is recommended in diesel applications that the coolant be checked frequently and SCAs replenished to comply with the engine's OEM recommendations.

- It is specifically formulated to protect cylinder liners from pitting in heavy duty applications. The low silicate level also provides aluminium compatibility for use in both light and heavy duty applications making it highly suitable for mixed fleets (light duty as well as heavy duty gasoline and diesel engines).

Specifications, Approvals & Recommendations

- ASTM D3306, D4985, D6210 (meets requirements)
- JIS K 2234 (meets requirements)
- AS/NZS 2108.1:1997 Type A (meets requirements)
- GB 29743-2013 (meets requirements)
- GM 1825M, 1899M (meets requirements)
- MTU MTL 5048 (approved)
- CAT EC-1 (suitable for use)
- Cummins 14603 (suitable for use)
- Ford WSS-M97B51-A1 (suitable for use)
- MAN 324 (suitable for use)
- MB DBL 7700 (suitable for use)
- Scania 6901 (suitable for use)
- Volvo Heavy Truck (suitable for use)

  For a full listing of equipment approvals and

recommendations, please consult your local Shell representative.

Typical Physical Characteristics

Properties			Method	Shell Coolant Premium MV
Colour			Visual	Yellow
pH			ASTM D1287	7.6 - 8.6
Specific Gravity	@15.6°C		ASTM D1122	1.070 - 1.080
Reserve Alkalinity			ASTM D1121	3.0
Freeze Point	50% in water	°C	ASTM D1177	-37

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

- **Health and Safety**

  This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

  Avoid contact with skin. Use impervious gloves with used coolant. After skin contact, wash immediately with soap and water.

  Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from https://www.epc.shell.com

- **Protect the Environment**

  Disposal of used or unused coolant must be carried out in accordance with local and national law.