PRODUCT DATA SHEET

Q8 TMF-EV LC

Thermal Management Fluid with low conductivity for battery electric vehicle (BEV)

Description

Q8 TMF-EV LC is a ready to use liquid heat transfer medium for indirect cooling of battery cells, modules and packs where coolants with low electrical conductivity are required. Q8 TMF-EV LC is miscible with other low conductive fluids with a similar conductivity range. TMF-EV LC provides 5 fold protection: electrical safety, material protection, flux stabilisation, boiling protection and frost protection

Applications

Q8 TMF-EV LC is a Low Conductivity Thermal Management Fluid for Battery Electric Vehicles requiring a low electrical conductivity of maximum 100 µS/cm. Optimized thermal conductivity properties for optimized thermal management performance throughout the full operating temperature range for highest efficiency of the Battery Electric Vehicle.

Benefits

- *Premium protection against rust and corrosion.*
- *Outstanding protection against cavitation in the cooling water system.*
- *Outstanding protection of the cooling system in a wide range of operating conditions*
- *Exceptional corrosion protection of coolant system metal compositions and solders.*

Environment, Health and Safety

Caution must be exercised when Q8 TMF-EV LC is used in combination with electrical motors, power electronics, auxiliary heaters or other heat rejecting devices as premature increase of electrical conductivity may occur.

Specifications, recommendations and approvals

Hyundai/Kia	Technology BSC-2 approved

Properties

	Method	Unit	Typical
Appearance	*Visual*	*-*	*Light Blue*
Density, 20 °C	*D 1122*	*kg/l*	*1120*
Freezing Protection 50-50%	*D 1177*	*°C*	*-36*
Equilibrium Reflux Boiling Point	*D 1120*	*°C*	*111*
Pour Point	*D 97*	*°C*	*-45*
eConductivity (25°C)	*ASTM D1125*	*µS-cm*	*100*
eConductivity (60°C)	*ASTM D1125*	*µS-cm*	*188*
pH	*D 1287*	*-*	*8,2*
Kinematic Viscosity, 20 °C	*D 445*	*mm²/s*	*3,7*

The figures above are not a specification. They are typical figures obtained within production tolerances.

Remarks

It is not intended for use in traditional engine coolant applications. It should not be applied in fuel cell nor immersive cooling applications where direct electrical contact is possible.

Sustainability

The product Carbon Footprint (PCF), cradle-to-gate (Q8Oils state of the art facility in Belgium), of Q8 TMF-EV LC is ***2.11*** *kg CO_2eq / kg.*
Please contact Q8Oils to learn more about the positive environmental impact, the handprint, of this product.
For more info check here

we take care