

S-OIL SEVEN SUPER COOLANT

Product Description

S-OIL 7 SUPER COOLANT is a phosphate-type coolant with a replacement interval of 2 years or 40,000 km. This product does not contain borate or silicate. It provides excellent corrosion protection for cooling system components, including aluminum castings, cast iron, steel, solder, brass, and copper, when used at concentrations over 30%. Generally, phosphate-type coolant is unstable in hard water, but this product is highly stable due to the use of special additives.

Applications

- Automotive cooling systems
- Industrial cooling systems and vessel refrigeration systems

Features and Potential Benefits

- Outstanding protection for hot surface aluminum
- Superior protection at high operating temperatures
- Improves water pump lifespan by reducing seal wear
- Excellent long-term corrosion protection for metals in the cooling system

Performance Level

- Recommended for use where the following specifications are called for :
KS M 2142, GB 29743, ASTM D 3306, JIS K 2234

Typical Properties

Test Items	Method	Requirements	Unit	Properties
pH 33vol% in distilled water	ASTM D 1287	7.0 ~ 11.0	-	8.36
Reserve Alkalinity	ASTM D 1121	-	mL	14.0
Specific gravity at 20°C	ASTM D 1122	-	-	1.129
Water content	ASTM D 1123	5 max.	wt%	4.0
Boiling point	ASTM D 1120	163 min.	°C	170
Forming	ASTM D 1881	Volume	mL	50
		Break time	Sec.	3
Staining characteristics	ASTM D 1882	No effect	-	No effect
Ash content	ASTM D 1119	5 max.	wt%	4.3
Flash point	ASTM E 502	-	°C	124
Refractive index	ASTM D 1218	-	-	1.430
Freezing point, 50vol% in DI water	ASTM D1177	-36.4 max.	°C	-37
Color	Visual	-	-	Pink

Content	Phosphate	ICP-AES	-	-	Contained
	Silicate	ICP-AES	None	-	None
	Test Items	Method	Requirements	Unit	Properties
Content	Nitrite	Ion-chromatography	None	-	None

Anti-Corrosion Performance

Test Items	Method	Requirements	Unit	Properties	
Glassware Corrosion Test	ASTM D 1384	Copper	± 10	mg/specimen	-4.0
		Solder	± 30		-9.2
		Brass	± 10		+4.1
		Steel	± 10		-2.9
		Cast Iron	± 10		-5.3
		Aluminum	± 30		-7.5
Simulated Service Test	ASTM D 2570	Copper	± 20	mg/specimen	-8.6
		Solder	± 60		-14.5
		Brass	± 20		-8.4
		Steel	± 20		-7.1
		Cast Iron	± 20		-7.3
		Aluminum	± 60		-11.4
Cavitation Erosion Corrosion Test	ASTM D 2809	8 min.	-	8	
Heat Transfer Corrosion Test	ASTM D 4340	±1.0	mg/specimen	-0.3	

Storage

- Store in a closed container in a dry, well-ventilated area at temperatures below 25°C.
- Shelf life: three years. Do not expose to direct sunlight.
- Keep out of reach of children and animals.

Disposal

When disposing of used coolant, it should be sent to an authorized or designated facility or business. Unauthorized disposal, such as discharging it into sewage or soil, is prohibited.

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2025.02.19.

This product used recommended and for the application for which it has been designed does not present any particular risk. A material safety data sheet is obtainable via your commercial adviser.