

# ANTIFREEZE COOLANT

## 50/50 ANTICONGELANTE/ REFRIGERANTE PREDILUIDO

### IF YOU'RE A BMW, JAGUAR, MERCEDES-BENZ, MINI, SMART OR VOLVO OWNER, YOU'VE FOUND YOUR MATCH WITH OEM EXTENDED LIFE EURO I.

Meeting or exceeding these particular vehicle specifications, MOTOR STAR Antifreeze/Coolant provides extended protection against rust, corrosion and pitting caused by cavitation for all coolant system metals, including aluminum. \*When added as an initial fill and properly maintained in accordance with engine manufacturer's maintenance recommendation, MOTOR STAR provides superior performance for these and other newer European model gasoline and light duty diesel powered vehicles requiring a nitrite, amine and phosphate (NAP) free, OAT engine coolant.

#### **APPLICATION**

European gasoline & light duty diesel powered vehicles requiring a nitrite, amine & phosphate (NAP) free, OAT engine coolant.

#### RECOMMENDED CHANGE INTERVAL

150,000 miles\* or 5 years of service protection.

#### **VEHICLE MAKES**

BMW, Jaguar, Mercedes-Benz, Mini, Smart, Volvo

#### COMPATIBILITY

For best results, do not mix with conventional high pH, phosphate, borate or silicate based coolants.

#### **FORMULATION**

Low silicate OAT. Nitrite, amine & phosphate (NAP) free. Suitable for gasoline or diesel engines.

#### PERFORMANCE FEATURE

Aluminum Compatible

#### PRODUCT COLOR

Blue

#### **PRODUCT OPTIONS**

Concentrate and 50/50 Pre-diluted

#### SPECIFICATION/PERFORMANCE LEVEL

ASTM D3306; BS6580 ASTM D6210-10 ASTM D7583

### RECOMMENDED FOR USE AND FULLY COMPATIBLE WITH PRODUCT MEETING $\mbox{\sc VW TL}774\mbox{\sc G+}$

#### ANTIFREEZE/DE-IONIZED WATER DILUTION CHART

PROTECTION AGAINST FREEZING (°F)	-34	-61	-83
VOLUME % ANTIFREEZE	50	60	70
VOLUME % DE-IONIZED WATER	50	40	30
**PROTECTION AGAINST BOIL-OVER (°F)	264	269	276

<sup>\*\*</sup>WITH A 100 KILOPASCALS (15 PSI) RADIATOR CAP IN GOOD CONDITION

Never use 100% coolant in concentrated form. A 50% dilution (i.e. when mixed with an equal volume of high quality soft, de-ionized or distilled water) is generally recommended for the best balance of protection against freezing, corrosion and summer boil over. For increased freeze protection in extremely cold areas, a 60% volume concentration can be used. Concentrations of greater than 70% by volume are not recommended.

#### TYPICAL PRODUCT PROPERTIES

CHARACTERISTIC	PERFORMANCE	TEST METHOD
рН	7.8–9.0	ASTM D1287
Specific gravityb	1.060-1.080	ASTM D1122
Freeze point (°C/°F)	-37/-34	ASTM D1177
Foam volume (ml)	150 max.	ASTM D1881
Foam break time (second)	5 max.	ASTM D1881
Reserve Alkalinity (ml)	1.5 max.	ASTM D1121
Chloride (ppm)	25 max.	ASTM D3634
Color	Blue	
Glycol Content (wgt.%)	47 min.	
Inhibitors and Water Content (wgt.%)	53 max.	

Values shown are for 50-50 pre-diluted coolant.  $^{\rm b}$  Measured at 15.6°C/60°F



