

# CoolTEC 66

## Organic Antifreeze Additive Package

Nitrites, Nitrates, Amines, Phosphates, Borates, and Silicates free

### DESCRIPTION

**CoolTEC 66** is an organic antifreeze additive package of the OAT (Organic Additive Technology) type. This product is an aqueous solution that is free from nitrites, nitrates, amines, phosphates, borates, and silicates. **CoolTEC 66** is designed to mix easily with either MEG (Monoethylene Glycol) or MPG (Monopropylene Glycol), resulting in a final concentrated or "ready-to-use" antifreeze solution suitable for the cooling systems of both light and heavy-duty automotive engines. This product imparts excellent corrosion protection to all cooling system metals and alloys used in internal combustion engines. When mixed with appropriate dosage in MEG, this product can meet the requirements of ASTM D3306/ASTM D4985 standard.

### DOSAGE

Add 8% by weight of the additive package based on the glycol (MEG) quantity while agitating the tank contents.

### PROCEDURE

First, charge the desired amount of glycol (MEG) into the blending tank. Heat the glycol to a minimum temperature of 80 °F (30 °C) and maintain this temperature throughout the blending process. While mixing the contents of the tank, add the required amount of **CoolTEC 66**. Proper mixing is crucial to ensure a consistent and high-quality product. After adding the additive package, agitate the mixture for 30 to 60 minutes. Additionally, to pass the ASTM foam test, you may need to add an appropriate antifoam agent.

### TECHNICAL PROPERTIES

Property	Unit	Value	Test Method
Appearance	---	Homogenous Liquid	Visual
Color	---	Pale Yellow-Yellow	Visual
pH (aqueous solution 50%)*	---	7.5 - 11.0	ASTM D1287
Specific gravity @ 15/15 °C	---	1.1 - 1.2	ASTM D1122
Boiling Point*	°C	163 min	ASTM D1120
Reserve alkalinity*	ml	5 min	ASTM D1121
Freezing Point	°C	<-12	ASTM D1177
Water Content*	Wt. %	5 max	ASTM D1123
Water solubility	---	Complete	---
Ash Content**	Wt. %	0.54	ASTM D1119
Foaming Test**	mL/s	150/5 max	ASTM D1881

\*8 wt.% in MEG

\*\* The reported results are typical

## INTERNATIONAL STANDARDS

- BS 6580
- ASTM D3306/ASTM D4985
- JIS 2234

### ASTM D1384 – Corrosion Test for Engine Coolants in Glassware (Antifreeze made by 8% CoolTEC 66 and 92% MEG)

METALS	WEIGHT LOSS (MG)	ASTM D3306 SPECIFICATIONS
COPPER	-1.0	10 max
SOLDER	-0.1	30 max
BRASS	-0.5	10 max
STEEL	-1.1	10 max
CAST IRON	-2.5	10 max
ALUMINUM	1.0	30 max

### ASTM D4340 – Corrosion of Cast Aluminum Alloys in Engine Coolants Under Heat Rejection Conditions (Antifreeze made by 8% CoolTEC 66 and 92% MEG)

METAL	Weight Loss mg/Cm <sup>2</sup> /week	ASTM D3306 Specification
Aluminum	0.37	1.0 max

## HANDLING AND STORAGE

**CoolTEC 66** must be stored at all times above 59 °F (15 °C). If a container arrives very cold at your warehouse, immediately place it in a heated room for 1–2 days, then stir it thoroughly before use. Once a container is opened, there is a possibility of the liquid phase evaporating, so be sure to close the container tightly after each use. Additionally, high temperatures above 90 °F (35 °C) for an extended period may cause degradation of the inhibitors. The shelf life is 12 months.

## SAFETY

For detailed information, please refer to the relevant Safety Data Sheet

The information and recommendations contained in this technical data sheet are based upon data collected by our laboratory, believed to be correct. However, no warranty or fitness for use or any other guarantees or warranty of any kind, expressed or implied, is made to the information contained herein.