

# COOLELF ECO BS 40%



## READY USE COOLANT – DO NOT ADD WATER

COOLELF ECO BS 40% is a ready to use organic coolant based on mono ethylene glycol and selected organic inhibitors, and contains no borax, amines, nitrites or phosphates.

COOLELF ECO BS 40% is recommended for use in all cooling systems of internal combustion engines.

**RECOMMENDATION:** Drain the existing coolant and flush the cooling system before filling with Coolelf Eco BS 40%. Please see the flushing procedure at the end of the document.

## APPLICATIONS

Protection	COOLELF ECO BS 40% is a ready to use coolant that provides effective protection against engine freezing or overheating.
Service life	It is recommended that the coolant fluid should be replaced once in 2 years.
Environment	All antifreezes and coolants based upon mono ethylene glycol are regarded as special industrial wastes and must be disposed of following the local regulations.

## CUSTOMER BENEFITS

Protection against Metal corrosion	The formula of COOLELF ECO BS 40% provides-
Excellent Performance	
No deposits	

- Very good Reserve Alkalinity (capacity to neutralize the acids resulting from the combustion gases)
- Excellent resistance to Foaming
- Chemical neutrality, inert to elastomeric seals and paints

COOLELF ECO BS 40% is already mixed with de-mineralized water. The organic additives and the quality of de-mineralized water eliminates deposit formation and blocking of coolant circuits that may lead to degradation of heat transfer and there by overheating of the engines.

## SPECIFICATIONS

### BS 6580

COOLELF ECO BS 40% conforms to the international specification BS 6580 as well as those of major manufacturers.

Characteristics	Test Method	Typical
Colour		Blue
pH	ASTM D1287	8.3
Reserve Alkalinity	ASTM D 1121	1.0
Boiling point	ASTM D1120	107°C
Temperature at which crystal appear	ASTM D1177	- 24°C

The typical characteristics mentioned above represent mean values

## Protection against Corrosion

### Hot immersion glassware corrosion test -BS 5117

	Weight loss in mg/coupon					
	Brass	Copper	Solder	Steel	Cast Iron	Aluminum
ASTM D3306 Limits	10	10	30	10	10	30
BS 6580 1992 (limits)	10	10	15	10	10	15
COOLELF ECO BS 40% ((typical values obtained for concentrate)	0.2	0.3	1.2	0.3	0.3	5.0

### Aluminum Heat Transfer Test- ASTM D4340

	Weight loss in mg/coupon
ASTM D3306 Limits	1.0
BS 6580 Limits	1.0
COOLELF ECO BS 40% ((typical values obtained for concentrate)	-0.2

Weight loss AFTER chemical cleaning acc. to ASTM procedure. Weight gain is indicated by a - sign

### FLUSHING PROCEDURE

For first time use of **COOLELF ECO BS** :

- Keep the engine running for 5 mins to circulate the earlier coolant
- Drain the earlier coolant completely
- fill the cooling system with minimum quantity of **Coolelf Eco BS** enough for circulation
- run the engine for minimum 10 mins
- completely drain the **Coolelf Eco BS**
- Fill the radiator with complete charge of **Coolelf Eco BS**

### STORAGE GUIDELINES

The product should be stored indoors at ambient temperatures and periods of exposure to temperatures above 35°C should be minimized. It is not advisable to expose the coolant to direct sunlight and humidity. Use of galvanized steel is not recommended for the pipes or the components of the cooling system. This leads to deposit formation and there by affect the heat transfer properties of the coolant. Please refer to the Material Safety data sheet for further safety information, available at [www.quickfds.com](http://www.quickfds.com)