



COOLANT CONCENTRATE BASIC



MEG based NAP free coolant concentrate (IAT)

Product ID: 80134

Product description

Coolant Concentrate Basic is an engine coolant concentrate (antifreeze) based on monoethylene glycol, containing no nitrites, amines or phosphates (NAP free). Suitable for both petrol and diesel engines.

Benefits

- ✓ Thermal characteristics that permit effective engine cooling without boiling.
- ✓ Anticorrosion protection for all metals and alloys used in the cooling system of modern vehicles.
- ✓ Compatible with rubber and plastics used in the cooling system.
- ✓ Protection against frost, depending upon the concentration chosen.
- ✓ Excellent antifoaming characteristics.
- ✓ Meets most European and International Standards.

Performance

Coolant Concentrate Basic complies with the following quality standards:

- AFNOR NF R15-601 (France)
- ASTM D3306 (USA)
- SAE J 1034 (USA)
- CUNA NC 956-16 (Italy)
- AS 2108 (Australia)
- ONORM V 5123 (Austria)
- BS 6580: 2010 (UK)
- UNE 26-361 (Spain)

Usage

Suitable for both petrol and diesel engines. Original Equipment Manufacturers' (OEMs) recommendations should be followed when replacing coolant.

Typical properties (product ID 80134)

Parameter	Value
Appearance	Clear liquid, free from suspended matter
Density	1,125 g/cm ³
pH (50% vol in water)	8,9
Freezing point (50% vol in water)	-37°C
Boiling point	169°C
Reserve alkalinity (ml HCl N/10)	21,5
Water content	3,8% wt
Foaming characteristics at 88°C	
Height	35 ml
Breaktime	2,0 seconds
Color	as dyed

These are typical properties and do not constitute a specification, for specification limits please refer to the product specification.



Freeze Protection

Coolant Concentrate Basic is a concentrated product and should be diluted for use with good quality water. TecLub recommends that for optimum performance distilled or deionized water is used. The freeze protection afforded by the various dilutions is detailed in the table below:

IAT Coolant (vol %)	H2O (vol %)	Freeze Protection (°C)
33	67	-20
50	50	-40
67	33	-70

In order to provide a satisfactory level of corrosion protection it is recommended to use at least 33% (1:2) volume of Coolant Concentrate Basic in the coolant solution. In line with most car manufacturers TecLub recommends a 50% (1:1) volume solution for optimum performance. For cold climates use 67% (2:1) volume, concentrations above 67% volume are not recommended and give no advantage.

Corrosion Protection

Protection from corrosion is the most important function of a coolant concentrate and is achieved by the inclusion of a well-balanced inhibitor package. In modern engines with the greater use of aluminium alloys and thinner section castings, avoidance of corrosion problems is critical. The inhibitor package of Coolant Concentrate Basic is the result of very extensive testing which includes laboratory tests, simulated service tests, static engine test and field service trials. Coolant Concentrate Basic successfully passes the German FVV Heft R443 tests. The tables below demonstrate the effective corrosion protection provided when tested against industry standards such as ASTM D1384 (multi-metal corrosion in glassware) and ASTM D4340 (corrosion of cast aluminium alloys under heat-rejecting conditions).

ASTM D1384 (Glassware Corrosion, mg per test piece)

Test specimen	MEG (33% vol in H2O)	IAT Coolant (33% vol in H2O)	ASTM D3306 limit
Copper	6.5	2	10
Solder	345	2	30
Brass	8	4	10
Steel	1474	2	10
Cast iron	2472	1	10
Aluminium	30	3	30

ASTM D4340 (Corrosion of Cast Aluminium Alloys under Heat-Rejecting Conditions)

Mass change (mg/cm ² /week)	ASTM D3306 limit
-0.1	1.0

Compatibility

Although it is always recommended to use deionized or demineralized water to dilute antifreeze, Coolant Concentrate Basic is formulated to be able to cope with different water qualities and is compatible with hard water. Coolant Concentrate Basic is compatible with all types of plastics and rubbers used in engine



coolant systems. Coolant Concentrate Basic is fully miscible with other coolants and can be safely mixed with them. However, optimal performance and longevity of service can only be guaranteed by exclusive use of Coolant Concentrate Basic.

Storage and Handling

Coolant Concentrate Basic has a shelf life of minimum two years when stored in air tight containers at a maximum temperature of 30°C. Translucent containers should not be stored outside in direct sunlight, especially in warm climates. Coolant Concentrate Basic can be stored in mild steel, lacquer lined or HDPE containers. As with any glycol-based engine coolant the use of galvanized steel is not recommended for pipes or any other part of the storage/mixing installation. Disposal of used or unused coolant must be carried out in accordance with local and national law, consult the material safety data sheet for further information.

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