

# TOTAL ANAC COOLANT



## The diagnostics system for cooling liquids

**TOTAL ANAC Coolant** is an in-depth diagnosis for the follow-up of cooling liquids and cooling systems.

**TOTAL ANAC Coolant** is recommended in the following cases:

- Detailed follow-up of the coolant behaviour and the condition of the system the cooling liquid is operating in.
- Punctual analysis and diagnosis in certain cases (breakdown, complaint, expertise...)
- Compliance check of the properties of the cooling liquid in use with the new cooling liquid.

## MEASURED CHARACTERISTICS

### Coolant

TOTAL ANAC Coolant determines the physical chemical properties of the cooling liquid and its protection against corrosion and temperature.

**Appearance, pH, reserve of alkalinity, hardness of water, density.**

**Protection against temperature:**

Ratio antifreeze/water, freezing and boiling temperature

**Corrosion of the cooling system:**

Spectrometric determination (ICP) of elements: Fe, Pb, Cu, Sn, Cr, Al, Ni (ppm)

**Protection against corrosion:**

Determination of the concentration corrosion inhibitors, organic and mineral.

### Coolant Visio

**COOLANT + Pollution by sediments:**

Detection and qualification of the pollution by solid particles (of medium and big dimension  $>5\mu$ ) by filtration and microscopic observation.



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# DIAGNOSIS REPORT

The diagnosis report is available within 1 week after reception in the lab.  
The results can be dispatched by post or e-mail or can be viewed on the Internet.  
In urgent cases, the report can be faxed immediately after diagnosis.



ANAC, a service of the TOTAL group

**ISO 9001:2008**

ANAC references : **TABC 1126 -820**

Vehicle: BB75010  
Component: Cooling circuit / 527103192

Make and type: ..... SPECIMEN / ZZ-  
Vehicle: .....  
Component: .....  
Diagnosis date: 28 february 2013  
Fluid : Elf Coolief Supra

	Coolant	Coolant	Coolant	Coolant	Coolant
Sampling date	17-NOV-10	12-JAN-11	18-FEB-11	15-SEP-11	18-FEB-13
Sample Number	CC000633	CC002305	CC002357	DM024347	CC010034
Working time	9451 H	9451 H	10190 H	11923 H	14026 H
Working time fluid	9451 H	9451 H	10190 H	11923 H	14026 H

Characteristics					
Appearance	Clear	Clear	Clear	Clear	Clear
pH at 25 °C	7.56	7.63	7.61	7.66	8.39
Color	Yellow	Yellow	Yellow	Yellow	Yellow
Res alcal 3,5 mlHCl.1N	30.93	31.05	32.08	31.89	27.37
Water Hard deg TH	0	0	0	0	0
Density	g/mL 1.058	1.058	1.058	1.059	1.072

Protection					
Glycol %	42	42	42	43	54
Water %	58	58	58	57	46
Freez. Temp. °C	-25	-25	-25	-26	-38
Boil. Temp. °C	107	108	108	108	114

Inhibitors					
Inhib. org1 mg/kg	6162	6423	6042	6223	5576
Inhib. org2 mg/kg	12644	12544	12157	12940	12243

Additives					
Boron mg/kg		10			
Magnesium mg/kg	10	10			
Sodium mg/kg	3314	3374	3026	3306	3548
Potassium mg/kg	49	50	41	42	29

Pollutions					
Tin mg/kg	<10	<10	<10	<10	<10
Lead mg/kg	<5	<5	<5	<5	<5
Nickel mg/kg	<5	<5	<5	<5	<5
Iron mg/kg	<5	<5	<5	<5	<5
Chromium mg/kg	<5	<5	<5	<5	<5
Aluminium mg/kg	<5	<5	<5	<5	<5
Copper mg/kg	<5	<5	<5	<5	<5

**Interpretation of the diagnosis**

- Glycol percentage too high
- Intervention to be confirmed by your services.

- ← Colour code : green , orange , red
- ← Registered data relative to the customer, material and cooling system.
- ← Registered data relative to the sample: number and operating hours
- ← Coolant properties
- ← Protection against temperature
- ← Protection against corrosion
- ← Additives
- ← Corrosion of the cooling system
- ← Information:
  - Info communicated by the customer
  - Interpretation of the diagnosis by an TOTAL ANAC expert
  - Comments

The 5 most recent diagnosis are displayed on the report.  
Reports are available in English, French, German, Dutch, Italian, Spanish and Portuguese.

A website that helps to manage the park monitoring: [www.anac-diagnosis.com](http://www.anac-diagnosis.com)

A personal and secured access for:

- the consultation of new reports and history
- the possibility of making queries
- the download of the data in Excel files
- mobile version for smartphones & tablets



Available in 7 languages

## TOTAL ANAC MAKES A DIFFERENCE

- A personalized interpretation of the diagnoses.
- Specific analysis routine for mineral and organic liquids.
- A website allowing a user-friendly management of the analyses data.
- Results available by post, e-mail, fax or via internet.
- More than 20 years of experience in coolant analyses.



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# COOLANT GRID



	TYPE ANALYSIS	UNIT	COOLANT	COOLANT VISIO
<b>CHARACTERISTICS</b>	Appearance		✓	✓
	Colour		✓	✓
	pH		✓	✓
	Hardness of water	°f	✓	✓
	Density		✓	✓
	RA 3,5	ml HCL/0,1 N	✓	✓
	RA 5,5	ml HCL/0,1 N	✓	✓
<b>PROTECTION</b>	Glycol	%	✓	✓
	Water	%	✓	✓
	Freezing point	°C	✓	✓
	Boiling point	°C	✓	✓
<b>POLLUTION</b>	Iron	mg/kg	✓	✓
	Lead	mg/kg	✓	✓
	Copper	mg/kg	✓	✓
	Tin	mg/kg	✓	✓
	Chromium	mg/kg	✓	✓
	Aluminium	mg/kg	✓	✓
	Nickel	mg/kg	✓	✓
<b>INHIBITORS</b>	Phosphates	mg/kg	✓	✓
	Nitrates	mg/kg	✓	✓
	Nitrites	mg/kg	✓	✓
	Silicates	mg/kg	✓	✓
	Molybdates	mg/kg	✓	✓
	Chlorides	mg/kg	✓	✓
	Sulfates	mg/kg	✓	✓
	Chlorates	mg/kg	✓	✓
	Benzoates	%	✓	✓
	Inib.org1	% or ppp	✓	✓
	Inib.org2	% or ppm	✓	✓
	Inhibitors 3	ppm	✓	✓
<b>ADDITIVES</b>	P	mg/kg	✓	✓
	B	mg/kg	✓	✓
	Na	mg/kg	✓	✓
	Si	mg/kg	✓	✓
	Ca	mg/kg	✓	✓
	Ba	mg/kg	✓	✓
	Mg	mg/kg	✓	✓
	Zn	mg/kg	✓	✓
	K	mg/kg	✓	✓
	Mo	mg/kg	✓	✓
<b>INSOLUBILITIES</b>	Insolubility	%		✓
	Filtration			✓



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