

Polarization Resistance

NF R 15-602-9

	typical value	limit
Aluminum:	$1.2 \times 10^6 \Omega \cdot \text{cm}^2$	NF R 15-601 $> 10^6 \Omega \cdot \text{cm}^2$

Quality Control

The above data represent average values at the time of going to press of this technical information. They cannot be regarded as specified data. Specified product data are issued as a separate product specification.

Handling

- Minor spills should be soaked up with oil absorbent granules, sand or dirt. The spillage site should then be washed with soapy water and dried.
- Wash off any spillage on paintwork immediately.
- Avoid contact with galvanised equipment when storing or dispensing this product, as this will prompt a corrosive reaction.

Shelf Life

- 5 years from date of manufacture when stored in originally closed, air-tight containers at temperatures of maximum 30°C.
- All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should not be exposed to hot sun or freezing conditions.
- Manufacture date can be identified from an eight digit code printed on the bottle. YYYY.MM.DD.

Colour

Mobil Antifreeze Advanced is usually available in clear red-violet.

Safety

When using this product, the information and advice given in our Safety Data Sheet should be observed. Due attention should also be given to the precautions necessary for handling chemicals

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights, etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

Mobil™ Antifreeze Advanced

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www.mobil-ancillaries.com

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Mobil™ Antifreeze Advanced

Data Sheets



Mobil Antifreeze Advance - Concentrate

Properties

Mobil Antifreeze Advanced is an engine coolant concentrate based on ethylene glycol that needs to be diluted with water before use. Mobil Antifreeze Advanced contains a corrosion inhibitor package based on organic additive technology (OAT coolant). Mobil Antifreeze Advanced is free of nitrites, amines, phosphates, silicates and borates.

Mobil Antifreeze Advanced contains Glysantin® G30® by BASF and fulfills the requirements of the following coolant standards:

AS 2108-2004, ASTM D 3306, ASTM D 4985, BS 6580:2010, CUNA NC 956-16, AFNOR NFR 15-601, ÖNORM V 5123, JIS K 2234:2006, SAE J1034, SANS 1251:2005 and China GB 29743-2013.

Mobil Antifreeze Advanced contains Glysantin® G30® by BASF and is officially approved by the following OEMs:

- Audi/Bentley/Bugatti/Lamborghini/Seat/Skoda/VW (TL774-D/F);
- DAF (MAT74002);
- Deutz (DQC CB-14);
- MAN (MAN 324 SNF);
- Mercedes Benz (MB-Approval 325.3);
- Mini Cooper D from 2007-2010;
- MTU (MTL 5048);
- Porsche vehicles built between 1996 and 2009; Siemens (wind power)



Miscibility

Since the special advantages of Mobil Antifreeze Advanced will only be achieved when it is used exclusively, mixing Mobil Antifreeze Advanced with other Mobil Advanced coolants or engine coolants from other producers is not recommended.

Mobil Antifreeze Advanced should be blended with water in a concentration amongst 33% to 60% by volume prior to infilling. The usage of a 50/50 ratio for the mixture of water and Mobil Antifreeze Advanced is generally advisable.

For preparation of the coolant it is recommended to use distilled or deionized water. In most cases tap water is also appropriate.

Analysis values of the water may not exceed the following threshold values:

Water hardness:	0 – 3.6 mmol/l
Chloride content:	max. 100 ppm
Sulfate content:	max. 100 ppm

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Chemical nature

Ethylene glycol with corrosion inhibitors

Appearance

Clear liquid without solid contaminants

Physical data

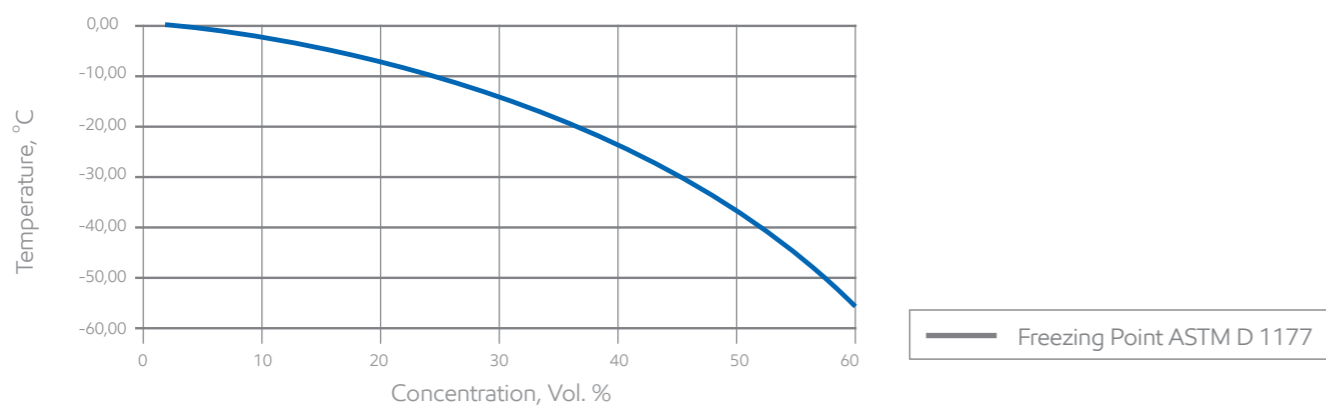
Density, 20 °C	1.122 – 1.125 g/cm ³	DIN 51 757-3
Viscosity, 20 °C	22 – 26 mm ² /s	DIN 51 562
Refractive index, 20 °C	1.432 – 1.436	DIN 51 423
Boiling point	> 160 °C	ASTM D 1120
Flash point	> 120 °C	DIN ISO 2592
pH value	8.2 – 8.6	ASTM D 1287
Reserve alkalinity	8 – 11 ml	ASTM D 1121
Water content	max. 3 %	DIN 51 777-1

Stability

Inhibitor stability after 168 h	no flocculation	VW TL 774 D/F
Hard water stability after 10 days	no flocculation	VW PV 1426

Frost Protection

Freezing point		ASTM D 1177
50 vol % solution	below -38 °C	
33 vol % solution	below -18 °C	



Foaming Characteristics

33 vol % solution	max. 20 ml / max. 5 ml	VW TL 774-D/F
33 vol % solution	max 50 ml / 3 s	ASTM D 1881

Mobil™ Antifreeze Advanced

Electrical Conductivity

30-50 vol % solution		
at 23 °C	approx. 4 mS/cm	ASTM D 1125

Glassware Corrosion Test

ASTM D 1384		
Metal coupons	typical weight change	ASTM D 3306 limit
	mg/coupon	mg/coupon
Copper	-0.8	10 max
Solder	-1.2	30 max
Brass	-0.9	10 max
Steel	0.1	10 max
Cast iron	1.3	10 max
Cast aluminum	-4.0	30 max

Simulated Service Test

ASTM D 2570		
Metal coupons	typical weight change	ASTM D 3306 limit
	mg/coupon	mg/coupon
Copper	-2.8	20 max
Solder	-1.7	60 max
Brass	-1.4	20 max
Steel	-0.3	20 max
Cast iron	3.0	20 max
Cast aluminum	-3.3	60 max

Cavitation Erosion Corrosion Test

ASTM D 2809		
	Rating	ASTM D 3306 limit
		Rating
Aluminum water pump	9	8 min

Heat Transfer Corrosion Test

ASTM D 4340		
	typical corrosion rate	ASTM D 3306 limit
	mg/cm ² /week	mg/cm ² /week
G AISi6Cu4	0.3	1.0 max