DEX-COOL COOLANT

FOR MOST MAKES & MODELS

DESCRIPTION

ACDelco DEX-COOL® Extended Life Coolant - mixed with the appropriate amount of water - is used as a cooling and heat transferring fluid in combustion engines. Excessive heat is transferred via the fluid to the radiator where the mixture is cooled by means of airflow.

ACDelco DEX-COOL® is an ethylene glycol based fluid that provides maintenance-free protection against freezing and boiling but also against corrosion. Extended coolant life, often for the whole life of the engine or vehicle, is obtained through the use of virtually non-depleting corrosion inhibitors



FEATURES & BENEFITS

Long-life corrosion protection
Protects aluminium and ferrous engine metals

Heat & cavitation protection
Supports heat transfer and protects high-temperature engine surfaces

Hard-water stability
Silicate- and phosphate-free inhibitor technology

Mixed-fleet versatility
Suitable for passenger cars and heavy duty vehicles

AVAILABILITY

ACDelco DEX-COOL® is available in the size options below:



1 Litre (19375292)



5 Litre (19375293/19525582)*



20 Litre (19375294/19525583)*



205 Litre (19284968)*

*Direct ship part numbers

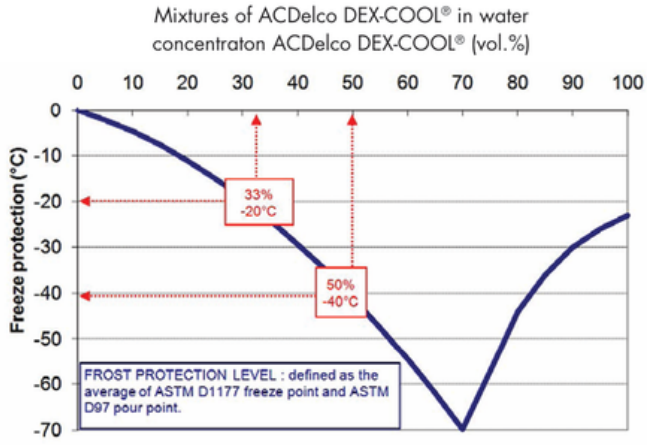
DEX-COOL COOLANT

FOR MOST MAKES & MODELS

APPLICATION

ACDelco DEX-COOL® provides long-life frost and corrosion protection. For optimal protection, use at least 33 vol.% in the coolant solution, providing frost protection to −20°C. Mixtures above 70 vol.% are not recommended; maximum frost protection of approximately −69°C is achieved at 68 vol.%.

ACDelco DEX-COOL® is suitable for engines manufactured from cast iron, aluminium, or combinations of both, as well as cooling systems containing aluminium or copper alloys. It is particularly suited to high-temperature aluminium engine applications.



COMPATIBILITY & MIXABILITY

ACDelco DEX-COOL® is compatible with most ethylene-glycol-based coolants; however, exclusive use is recommended for optimum corrosion protection and sludge control.

For optimal performance and controlled quality, we recommend the use of deionised or distilled water to prepare the ready-to-use dilutions although lab testing has shown that acceptable corrosion results are obtained with water of 20°dH, containing up to 500 ppm chlorides or 500 ppm sulphates.

RECOMMENDED BY ACDELCO FOR USE IN APPLICATIONS REQUIRING:

- Ford specification WSS-M97B44-D
- Mercedes-Benz specification 325.3
- General Motors specification GM 6277M
- MAN specification 324 type SNF
- Volkswagen specification TL 774F

Even though a formal approval has not been obtained from some OEMs, ACDelco DEX-COOL® is suitable for use as antifreeze / coolant in any combustion engine. Refer to the OEM's manual for recommended coolant type

FLEET TESTS

ACDelco DEX-COOL® has been extensively fleet tested for over 100,000,000 km! 540 vehicles, both heavy duty and automotive, have been closely monitored and showed:

- Limited depletion rates of the corrosion inhibitors: less than 10 %
- Superior aluminium protection
- Average pump life increased by 50 %
- Excellent cavitation protection even without the addition of nitrite
- No compatibility problems with good quality traditional coolants
- No compatibility problems with seals, hoses and plastic components

DEX-COOL COOLANT

FOR MOST MAKES & MODELS

STORAGE REQUIREMENTS

TStore above −20°C, preferably at ambient temperature, and minimise exposure to temperatures above 35°C. Keep coolant in translucent containers indoors and away from direct sunlight, as heat and sunlight may cause fading or discolouration.

ACDelco DEX-COOL® can be stored for at least 8 years in unopened containers without affecting product quality or performance. It is strongly recommended to use new containers and not recycled ones As with any antifreeze coolant, the use of galvanised steel is not recommended for pipes or any other part of the storage/mixing installation.

TOXICITY & SAFETY

For Toxicity and Safety Data we refer to the Safety Data Sheet. The information and advice given should be observed and due attention should be given to the precautions necessary for handling chemicals. This product is available to download from our website

APPENDIX - TECHNICAL INFORMATION

DESCRIPTION	ACDelco DEX-COOL®	ASTM 3306 requirements	METHOD
Ethylene glycol	93 % w/w glycol	Base	
Other glycols	0.5 % max.	5 % w/w max.	
Inhibitor content	5 % w/w		
Water content	5 % w/w max	5 % w/w max	ASTM D1123
Ash content	1.1 % w/w typ.	5 % w/w max	ASTM D1119
Nitrite, amine, phosphate, borate, silicate	Nil		
Specific gravity, 15°C	1.116 typ.	1.110 to 1.145	ASTM D5931
Specific gravity, 20°C	1.113 typ.		ASTM D5931
Equilibrium boiling point	180°C typ.	> 163°C	ASTM D1120
Reserve alkalinity (pH 5.5)	6.2 typ.	Report	ASTM D1121
pH, 20°C	8.6 typ.		ASTM D1287
Refractive Index, 20°C	1.430 typ.		ASTM D1218

DESCRIPTION	50% Dilution	40% Dilution	33% Dilution	ASTM 3306	METHOD
pH	8.6	8.4	8.3	7.5 to 11.0	ASTM D1287
Foaming Properties at 25°C Break Time	50ml typ. 5 sec typ.	-	-		ASTM D1881
Foaming Properties at 88°C Break Time	50ml typ. 5 sec typ.	-	50ml typ. 5 sec typ.	150ml max.	ASTM D1881
Initial crystallisation	< -30°C	< -24°C	< -18°C	< -37°C	ASTM D1177
Freezing protection	-40°C typ.	-27°C typ.	-20°C typ.		
Specific gravity, 20°C	1.068 typ.	1.056 typ.	1.053 typ.		ASTM D5931
Reserve alkalinity (pH 5.5)	3.0 typ.	2.4 typ.	2.1 typ.		ASTM D1121
Refractive Index, 20°C	1.385°C typ.	-	1.369 typ.		ASTM D1218
Equilibrium boiling point	108°C typ.	-	104°C typ.		ASTM D1120
Effect on non-metals	No effect	No effect	No effect		GME60 255
Staining characteristics	-	-	No effect	No effect	ASTM D 1882
Hard water stability	No precipitate	-	-		VW PV 1426

DEX-COOL COOLANT

FOR MOST MAKES & MODELS

ASTM D1384 GLASSWARE CORROSION TESTS

WEIGHT LOSS IN MG/COUPON[1]						
Product	Brass	Copper	Solder	Steel	Cast Iron	Aluminium
ASTM D3306 (max)	10	10	30	10	10	30
ACDelco DEX-COOL®	1.6	1.9	0.1	-0.5	-1.4	4.6

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

ASTM D4340 ALUMINIUM HEAT TRANSFER TEST

ASTM D4340 is almost identical to BS 5117:2.6

Product	WEIGHT LOSS IN MG/CM2/WEEK[1]
ASTM D3306 (max)	1.0
ACDelco DEX-COOL®	<0.2

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

MODIFIED MTU HIGH TEMPERATURE CORROSION TEST (2000 W)

WEIGHT LOSS IN MG/COUPON[2]						
	Cast Iron			Aluminium		
Test Duration (Hrs)	48	69	116	[2]48	69	116
Reference Coolant[3]						
Hot Coupon	-30.0	-13.1	4.3	-18.2	284.2	-
Top Coupon	-20	1.6	5.7	6.2	152.2	-
ACDelco DEX-COOL®						
Hot Coupon	-0.2	-2.1	-0.5	20.2	24.6	35.1
Top Coupon	3.4	0.1	1.9	20.1	42.1	18.5

[2] Weight loss AFTER chemical cleaning acc. to (shortened) MTU procedure. Weight gain is indicated by a - sign.
[3] Reference coolant is a conventional, high quality, silicate-based coolant

AGING TEST

To emphasise the corrosion protection offered by ACDelco DEX-COOL®, the aging test is conducted under more severe conditions compared to those commonly used in the industry.

Test Conditions	Typical Industry	ACDelco DEX-COOL®
Test duration	169 h	504 h
Fluid content	5.0L	6.0L
Pressure	1.5 bar	2.5 bar
Flow	3.0 L/min	3.5 L/min
Heat Imput	5500 W	5000 W
Temperature in heating vessel	95 °C	115°C
Temperature in cooling vessel	75 °C	95°C
Concentration of coolant in water	40 vol. %	20 vol. %

DEX-COOL COOLANT

FOR MOST MAKES & MODELS

Weight loss in g/m² (using Arteco test parameters) [1]							
	Al[2]	AlMn	Cast Iron	Steel	Cu	CuZn	Solder CB
Reference Coolant[3]							
After Initial Cleaning	82.10	64.02	-2.19	-1.68	3.62	2.90	21.45
After Final Cleaning	125.01	94.33	-0.36	0.11	4.99	5.66	25.83
ACDelco DEX-COOL®							
After Initial Cleaning	9.77	0.71	-0.07	0.17	1.44	1.62	0.43
After Final Cleaning	23.58	4.14	0.0	0.24	2.63	2.53	0.55

[1] Weight loss AFTER chemical cleaning acc. to (shortened) MTU procedure. Weight gain is indicated by a - sign.
[2] Aluminium SAE 329.
[3] Reference coolant is conventional, high quality, silicate-based coolant.