UNDERSTANDING COOLANTS

WHAT IS COOLANT?

Automotive coolant is a solution mixed with water to improve heat transfer and control the operating temperature of an engine. Besides its function in cooling down the engine, coolant also contains ingredients that inhibit rust, corrosion and scale. These are called inhibitors. They also prevent cavitation which is the rapid formation and collapse of vapour or air pockets, a frequent cause of structural damage.

Some coolants have an Anti-Freeze Anti-Boil package that raises the boiling point and lowers the freezing point of water. Some coolants change the surface tension of the water allowing it to circulate better, removing heat spots and actually lowering the running temperature of an engine.

ENGINES CAN BE AIR COOLED OR WATER COOLED

Water cooled engines use water to assist the heat transfer process from the engine as it operates. However, engines are made from metal, usually of more than one type and are likely to rust over time.

Hence an engine coolant is required.

WHAT MUST ENGINE COOLANT DO?

- Be an effective heat exchange fluid.
- Protect against rust, corrosion, cavitation, freezing and overheating in alloy, mixed metal and cast iron engines.
- Be compatible with plastics and rubbers.
- Be chemically stable (i.e. no "drop out").
- Mix readily with water!
- Prevention of deposits.

THERE ARE TWO TYPES OF COOLANTS

TYPE "A" Coolants - Anti-Freeze Anti-Boil:

- Inhibitors
- Water
- Glycols

Type "A" has an Anti-Freeze Anti-Boil component such as Ethylene Glycol or Propylene Glycol that raises the boiling point of the water and lowers the freezing point.

There are different types of inhibitor packages used in Type A Anti-Freeze Anti-Boil coolants and different dosages of glycol depending on the application.

TYPE "B" Coolants:

Type "B" typically has no Anti-Freeze Anti-Boil performance and are essentially inhibitors only. There are different types of Inhibitor formulations used in Type B coolants. Not all are compatible with one another.

Hint - Coolant Colour:

Just because a coolant is coloured doesn't mean it's an Anti-Freeze Anti-Boil product.

The colour in coolant is a dye and should never be used to distinguish the type of coolant. Coolants are generally clearly labeled Type "A" or Type "B."

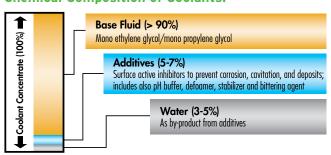


COOLANT COMPOSITION

Water is an excellent heat transfer liquid especially in an internal combustion engine but when it freezes, it actually expands which is called Negative Thermal Expansion. If the water freezes inside an engine radiator or engine it can then cause damage due to this expansion.

Water combined with glycol and inhibitors form a Type "A" engine coolant. The typical break up of a premixed Type "A" are shown on the chart below. Glycol and water form the majority of the cooling system solution. Inhibitors only a small percentage of the coolant.

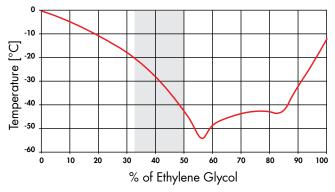
Chemical Composition of Coolants:



Visit our website at www.penriteoil.com

GLYCOL CONTENT

Coolants that have an Anti-Freeze Anti-Boil component generally have a Glycol base. Glycol never loses its Anti-Freeze Anti-Boil properties but inhibitors deplete over time causing the need to change coolant. The level of Glycol in the coolant mixture, gives an indication of the freezing point and boiling points. The coolant mixture needs to be between 33% and 50% for best results.



Dose Freezing / Point Boiling Point - Unpressurised:

33%	-18°C	104°C
50%	-38°C	109°C

CORROSION INHIBITORS

A corrosion inhibitor is a chemical compound that, when added to a liquid (in this case coolant) decreases the corrosion rate of a material, typically a metal or alloy.

A common mechanism for inhibiting corrosion involves formation of a coating, often a passivation layer, which prevents access of the corrosive substance to the metal.

Inhibitors only make up a small fraction of the overall coolant as water and glycol form the majority of the product but they can have a vast effect on the performance of the coolant in maintaining the system in good condition.

ADDITIVES MAY INCLUDE

These all fulfill different functions within the coolant:

- Organic acids
- Silicates and phosphates
- Nitrites
- De-foamers
- Bittering agents
- Borates

THE THREE BASIC "TYPES" OF INHIBITOR PACKAGES

CONVENTIONAL: Uses conventional technology, in other words, does not use any of the newer style, organic inhibitors.

ORGANIC: Uses 100% organic acid salts.

HYBRID: These products use mainly organic acids but with up to two or three conventional inhibitors.

Automotive manufacturers will generally specify silicates and phosphates. Heavy Duty engine manufacturers will generally specify nitrites and molybdates.

OAT FORMULATIONS

OAT formulations are generally compatible with conventional formulations, but care may need to be taken when mixing colours.

OAT formulations react to some extent with some of the inorganic salts and caustics used in conventional types.

The result in combining the two leads to a generation of cloudiness and loss of extended life properties.

Characteristics of OAT Coolant:

- Low inhibitor depletion rates, "fill for life" coolant (Long Life).
- Compatibility with many coolant standards.
- Extreme stability under high temperatures.
- Provides excellent heat transfer rate.

HYBRID FORMULATIONS

Hybrid formulations are called Hybrid because they contain ingredients from both OAT and conventional formulas. Hybrid formulations partially or totally eliminate the problem of straight OAT or straight conventional Anti-Freeze compatibility. Hybrid formulations contain significant concentrations of conventional inhibitors as well as organic carboxylate or other salts.

Characteristics of Hybrid Coolant:

- Nitrites form a stable layer that protects the internal surfaces against corrosion, cavitation and scaling.
- High reliability.
- Compatible with engines and cooling systems of different design.
- Good expertise over years from many car producers.
- Extended change intervals.

Other Coolant Facts:

- Type "A" Anti-Freeze Anti-Boil coolants are now found in new vehicles.
- The type of coolant, whether it be an OAT or Hybrid formulation is dependent upon the vehicle manufacturer and determined by region, climate, type of vehicle etc.
- The colour of the coolant is a dye only and may change from region to region depending on the preference of the vehicle manufacturer and the supplier of the coolant to the manufacturer.
- Depletion rates of inhibitors determines the lifespan of coolants. Long life coolants can last up to and beyond 8 years.
- There are OEM (Original Equipment Manufacturer) Approvals on coolants for some manufacturers.

STORAGE LIFE OF COOLANTS

Concentrated coolants have a safe shelf life of about 3 years when stored correctly.



ANTI-FREEZE ANTI-BOIL COOLANT HISTORY

Ethylene Glycol Anti-Freeze was first used in Automotive in 1926 (The same year Penrite was born). Prior to this it was used to manufacture Dynamite.

Alcohol made from methanol was originally used as Anti-Freeze as it had a lower freezing point than water. The problem with alcohol is that it can accelerate corrosion in metals and would evaporate over time. Other glycols used are Propylene Glycol and Glycerol which are non-toxic.

Ethylene Glycol is very toxic and should be disposed of carefully if changing a vehicle's coolant.

RADIATOR FLUSHES

"When in doubt, Flush it out"

Flushing the cooling system prior to using new coolant ensures that the old fluid won't contaminate the new (especially if they are incompatible) as well as improving the operating efficiency of the cooling system by cleaning out the system internally.

Characteristics of a good radiator flush:

- Be fast acting.
- Remove rust, scale and other deposits.
- Prepare the system for the new coolant.
- Neutralises any leftover coolant remaining in the engine.
- Be harmless for all metals.
- Safe for rubber and hoses.
- Compatible with all coolants.

RADIATOR STOP LEAKS

Radiator Stop Leak provides a temporary repair for leaking radiators, heater cores, hoses and joints, weeping head gaskets and welsh plugs. They are designed to be compatible with most coolants.

It is important that these type of products are used as a temporary repair until mechanical work can be obtained to permanently fix leaking cooling systems. Failure to fix leaking cooling systems can lead to expensive engine repair work from overheating.

OTHER USES FOR COOLANT

Hydrolastic Suspension Fluid:

Suspension fluid for Morris, Austin, Leyland, BMC and Wolseley vehicles.

Hydrolastic Suspension Fluid is a "fluid" system that was used on a number of Morris 1100 derivatives, Austin and Morris 1800s, Minis between 1964 and 1971 and Wolseley 18/85s as well as MG/F's produced from 1995 to 2002.

The units were filled with a mixture of alcohol, water and additives to prevent corrosion. A valve in the top of the fluid separating chamber replaced the conventional damper of other systems.

When either wheel on one side of the car hit a bump in the road, the fluid was displaced and caused the unit on the other wheel to react. In this way a bump at the front made the rear of the car rise to a corresponding height and the car always remained level.

There is not a particular dedicated product replacement for the original fluid. Available off the shelf in most outlets, an approximate product for this application can be made by mixing - 33% by volume Anti-Freeze Anti-Boil coolant with 67% by volume distilled water.

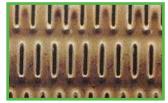
COOLANT TEST STRIPS

Coolant Test Strips are disposable test strips for measuring the concentration level and condition of Anti-Freeze Anti-Boil coolants used in all types of combustion engines.

They effectively test the coolant's concentration as well as the pH level and alkalinity to determine when service of the coolant is necessary.

RESULTS WITH & WITHOUT COOLANT

Radiator, Head Gasket and Thermostat Housing:















COOLANTS

Penrite's premium range of OEM approved Coolants and Inhibitors, cover most vehicles on the road. As with engine oils, different vehicle manufacturers specify different types of engine coolants and inhibitors for their vehicles. Therefore, the correct engine cooling product for your vehicle is critical in maintaining its performance and longevity as well as preserving your vehicles manufacturer warranty. Penrite coolants are suitable for Passenger Cars, Commercial Vehicles, 4WDs, Heavy Duty Vehicles, Motorcycles, Marine, Racing, Veteran, Vintage & Classic and many more.

TYPES OF COOLANTS: There are 2 main types of coolants available, TYPE "A" AND TYPE "B"

TYPE "A" has an Anti-Freeze Anti-Boil component such as Ethylene Glycol or Propylene Glycol that raises the boiling point of the water and lowers the freezing point.

TYPE "B" do not have Anti-Freeze Anti-Boil characteristics and are essentially inhibitors only.

There are different formulations of both Type A and Type B coolants that are available depending on the type of application needed, specification required, OEM requirements etc.

OEM APPROVALS

PRODUCT:	OEM APPROVALS:
8 YEAR	Audi/Bentley/Bugatti/Lamborghini/Seat/Skoda/VW TL 774-G (G12, G12+, G12++),
500,000km RED	Porsche 911/Boxster/Cayman/Cayenne/Panamera (as from 1997), Cummins CES 14603,
(Concentrate/Premix)	MAN 324 Type Si-OAT, Mercedes Benz MB 325.5/6
7 YEAR 450,000km GREEN (Concentrate/Premix)	Audi/Bentley/Lamborghini/Seat/Skoda/VW TL 774-C (G11), Mercedes Benz MB 325.0, Opel B 040 0240, Volvo Car 1286083 Issue 002, BMW/Mini N 600 69.0, Deutz H-LV 0161 0188, Jenbacher TA-Nr. 1000-0201, Jaguar VIN 878388 (Built to 1999), Liebherr TLV 035/TLV 23009 A, MAN 324 NF/B&W List 3.3.7, Maybach Specification 325.0, MTU MTL 5048, Porsche (pre 1995), Rolls Royce (post 1998, Saab 690 1599, Smart Specification 325.0, Tesla (Vehicles built from 2013), Van Hool, Volvo Truck (pre 2005), Zastava
7 YEAR	Audi/Bentley/Bugatti/Lamborghini/Seat/Skoda/VW TL 774-D/F, DAF MAT 74002,
450,000km BLUE	MTU MTL 5048, Jaguar (as from 1999) VIN 878389, MAN 324 SNF, Porsche (as built from 1996),
(Concentrate/Premix)	Mini Cooper D (as from 2007), Mercedes Benz MB 325.3

8 Year 500,000km Red Concentrate & Premix NEW

Technology: Type A, Si-OAT

Product Code	Pack Size	Carton Qty
Concentrate COOLRED001	1 Litre	6
COOLRED0025	2.5 Litres	4
COOLRED005	5 Litres	3
COOLRED020	20 Litres	1
COOLRED060	60 Litres	1
COOLRED205	205 Litres	1

Premix

COOLREDPMX001 1 Litre 6
COOLREDPMX005 5 Litres 3
COOLREDPMX205 205 Litres 1

8 Year 500,000km Red REPLACES 6 Year 350,000km OEM Approvals: VW/Audi/Bentley/Bugatti/Lamborghini/Skoda/Seat/TL 774-G (G12, G12+, G12++), Porsche 911/Boxster/Cayman/Cayenne/Panamera (as from 1997), Mercedes Benz MB 325.5/6, MAN 324 Type Si-OAT, Cummins CES 14603

Colour: Red

Key Specifications: VW/Audi/Skoda/Bentley/Lamborghini/Seat TL774-D/F, Toyota Long Life TSK2601G, Ford WSS M97B44-D, Holden/GM 6277M/1825M/1899, Mitsubishi ES-X64217, Nissan NES M505

Penrite 8 Year 500,000km Red Coolant, Concentrate & Premix are GENUINE GLYSANTIN G40 Original Equipment Manufacturer (OEM), Fully Licensed & Warranty Approved, Type "A" Ethylene Glycol, Anti-Freeze Anti-Boil coolants as used in initial manufacturer factory fills. They use a technically advanced Si-OAT (Organic Acid Technology) based inhibitor system that is Phosphate, Amine, Borate and Nitrite free. The extended long life inhibitor formulation prevents rust, corrosion, cavitation and degradation of the cooling system.



Concentration Level is 50%

7 Year 450,000km Green Concentrate & Premix NEW

Code	Size	Qty
Concentrate		
COOLGREENC	001 1 Litre	6
COOLGREENO)25 2.5 Litres	4
COOLGREENC	05 5 Litres	3
COOLGREENC	20 20 Litres	1
COOLGREENC	60 60 Litres	1
COOLGREEN2	.05 205 Litres	5 1

Carton

Carton

Product Pack

Premix

COOLGREENPMX001 1 Litre 6
COOLGREENPMX005 5 Litres 3
COOLGREENPMX020 20 Litres 1
COOLGREENPMX205 205 Litres 1

7 Year 450,000km Green REPLACES 4 Year & HD 50/50 OEM Approvals: VW/Audi/Bentley/Lamborghini/Skoda/Seat TL 774-C (G11), Mercedes Benz MB 325.0, MAN 324 NF, Volvo Car 1286083 Issue 002, BMW/Mini N 600 69.0 & more Key Specifications: AS 2108-2004 Type A, ASTM D3306, BS 6580, Ford M97B44-A/M97B51-A1, Chrysler MS-9769, Holden HN2217/HN2043, GM 1825M/1899M, JASO M325 (Japan), SAE J1034

Technology: Type A, Hybrid (HOAT) Colour: Green

Penrite 7 Year 450,000km Green Coolant, Concentrate & Premix are GENUINE GLYSANTIN G48, Original Equipment Manufacturer (OEM), Fully Licensed & Warranty Approved, Type "A" Ethylene Glycol, Anti-Freeze Anti-Boil coolants as used in initial manufacturer factory fills. They use a technically advanced HYBRID (HOAT-Hybrid Organic Acid Technology) based inhibitor system that is Phosphate, Amine and Nitrite free. The extended long life inhibitor formulation prevents rust, corrosion, cavitation and degradation of the cooling system.



Premix Coolant Concentration Level is 50%

7 Year 450.000km Blue Concentrate & Premix NEW

Technology: Type A, OAT

Size	Qty	
1 Litre	6	
5 Litres	3	
20 Litres	1	
	1 Litre 5 Litres	1 Litre 6 5 Litres 3

Pack

Premix

Product

COOLBLUEPMX001 1 Litre 6
COOLBLUEPMX005 5 Litres 3

7 Year 450,000km Blue REPLACES 3 Year & Anti-Freeze Anti-Boil Premix Blue OEM Approvals: VW/Audi/Bentley/Lamborghini/Skoda/Seat/ TL 774-D/F, DAF MAT 74002, MTU MTL 5048, MAN 324 SNF, Jaguar (as from 1999) VIN 878389, Mini Cooper D (as from 2007), Porsche (as built from 1996), Mercedes Benz MB 325.3 Key Specifications: AS/NZS 2108-2004 Type A, ASTM D3306/D4985, Ford ESE M97B44-D, GM/Holden 6277M/1825M/1899M, Mitsubishi ES-X64217, Mercedes MB 326.3 (Premix Only), Toyota Long Life TSK2601G, Nissan NES M5059

Penrite 7 Year 450,000km Blue Coolant, Concentrate & Premix are GENUINE GLYSANTIN G30, Original Equipment Manufacturer (OEM), Fully Licensed & Warranty Approved, Type "A" Ethylene Glycol, Anti-Freeze Anti-Boil coolants as used in initial manufacturer factory fills. They use a technically advanced OAT (Organic Acid Technology) based inhibitor system that is Silicate, Phosphate, Amine, Borate and Nitrite free. The extended long life inhibitor formulation prevents rust, corrosion, cavitation and degradation of the cooling system. Suitable for use where a blue coloured coolant is originally specified.



Premix Coolant Concentration Level is 50%



350,000km Green Concentrate & Premix NEW

Product Code	Pack Size	Carton Qty
Concentrate	4.1.21	
COOL350001 COOL3500025	1 Litre 2.5 Litres	<u>6</u> 4
COOL3500025	5 Litres	3
COOL350020	20 Litres	1
COOL350060	60 Litres	1
COOL350205	205 Litres	1

Premix

COOL350PMX001 1 Litre 6 COOL350PMX005 5 Litres 3

350,000km Green REPLACES PROAFAB

Technology: Type A, Hybrid (HOAT) Colour: Green

Kev Specifications: AS/NZS 2108-2004 Type A, ASTM D3306,

SAE J1034, Ford ESE M97B44-A, Ford WSS-M 97B51-A1, Holden HN1825M/HN1899/2043, BS 6580:1992, Chrysler MS-9769, MAN List 3.3.7, Cummins CES 14603, John Deere JDMH24, Leyland BLS.22.AF.01, MTU MTL 5048, JCB STD00088 Mercedes Specification 325.0

Penrite 350,000km Green Coolant, Concentrate & Premix are Type "A" Anti-Freeze Anti-Boil, silicate, phosphate and amine free coolants, safe for all types of light and heavy duty vehicles. They use a technically advanced HYBRID (HOAT - Hybrid Organic Acid Technology) inhibitor formulation which provides a stable, long life coolant that prevents rust, corrosion, cavitation and degradation of the cooling system.





Premix Coolant Concentration Level is 33%

Universal Top Up Coolant Premix

Product Pack Carton Technology: Type A, Hybrid Colour: Yellow Code Size Qty

AFABPMXYELLOW001 1 Litre

AFABEC01PMX205 205 Litres



Key Specifications: AS2108-2004 Type A, BS 6580, SAE J1034, ASTMD3306/4985, Ford M97-B44A/B44D/51A, Mitsubishi ES-X64217, Chrysler MS-9769, Toyota Long Life TSK2601G, Nissan NES M5059, GM 6277M/1825M/1899M, Holden HN2217/HN2043 & many more

Penrite Universal Top Up Coolant is ready to use and can be mixed with all coolant and inhibitor types including those that contain ethylene glycol and long life, low depletion rate inhibitors. It is specially designed not to discolour existing coolant if used at no more than 10% of system capacity.



PGXL Coolant Premix (Propylene Glycol)

Product Code	Pack Size	Carton Qty	Technology: Type A, Hybrid	Colour: Blue
PGXLPMX020	20 Litres	1	Key Specifications: ASTM D6257, D6211, Freightliner, Scania, Caterpillar, GM, MTU, Cummins, Kenworth, Mack, Mercedes Detroit Diesel, Volvo, Peterbilt, Ford, PACCAR, New Holland	orth, Mack, Mercedes Benz,
		Panrita PGXI Coolant Pramis is a	blue coloured beavy duty	

Penrite PGXL Coolant Premix is a blue coloured, heavy duty propylene glycol based, low silicate, phosphate and amine free hybrid engine coolant. Suitable for use where the manufacturer specifies a propylene glycol coolant. No further dilution is required.



HD Longlife ECOI AFAB Concentrate & Premix

Product Code	Pack Size	Carton Qty	Technology: Type A, Hybrid	Colour: Deep Red
Concentrate AFABEC01020 AFABEC01205	20 Litres	1	Key Specifications: AS2108-2004 Type SAE J1034/J1941, Caterpillar EC-1, MA	N 324, Mack 014 GS 17009,
	205 Litres	I	Volvo VCS, Isuzu (GM6277M), MTU MTL Daimler MS7170/9769, Detroit 7SE-29	
Premix AFABEC01PMX020	20 Litres	1	Penrite HD Long Life EC01, Conce	

coloured, long life, Type A, Hybrid, US style, heavy duty ethylene glycol based coolant that utilises a long drain, low depletion rate inhibitor system. They are designed for use in trucks, buses, agricultural and construction equipment, stationary engines and in passenger cars/light commercial vehicles where Anti-Freeze and/or Anti-Boil properties are required. They are phosphate, silicate and anime free.







RCI 100 Concentrate NEW

Product Code	Pack Size	Carton Qty
COOL10005	500 Millilitre	s 6
COOL1001	1 Litre	6
COOL1020	20 Litres	1
C00L1205	205 Litres	1

RCI 100 REPLACES
ADRIC, Pro Coolant Inhibitor &
Radiator Inhibitor

Technology: Type B Colour: Green Treat Rate: 1 litre makes up to 20 litres

Key Specifications: AS/NZS 2108.1-1997 Type B, Ford ESD-M99B166C, Deutz-MWM 0199-209, MAN 248, MAN B&W D36 5600,

Sulzer Diesel ZBS0503, Wartsila 32-9011

Penrite RCI 100 is a Type "B", radiator corrosion inhibitor that protects against cavitation, scaling and oxidisation in vehicles that do not require a Type "A" Anti-Freeze Anti-Boil coolant. It is an effective engine coolant that uses a Hybrid Organic Acid Technology (HOAT) inhibitor to provide maximum protection against corrosion whilst providing superior heat transfer to reduce engine operating temperature and prevent cavitation.



Classic Car Coolant Concentrate

Product	Pack	Carton	Technology: Type B	Colour: Clear
Code	Size	Qty	Treat Rate: 1 litre makes up to	15 litres
VCIO01	1 Litre	6	Key Specifications: AS 2108-2004	Type B

Penrite Classic Car Coolant is a Type B colourless, hybrid-organic, non-glycol based corrosion inhibitor designed specifically for use in Edwardian, vintage, veteran & classic car cooling systems that protects against corrosion, cavitation, scaling and oxidisation.



10 Tenths Race Coolant Inhibitor Concentrate

Product	Pack	Carton	Technology: Type B Colour: Rec	d
Code	Size	Qty	Treat Rate: 1 litre makes between 10-20 litres	
RCI001	1 Litre	6	Key Specifications: AS 2108-2004 Type B	

Penrite 10 Tenths Race Coolant Inhibitor Concentrate is a non glycol based coolant inhibitor concentrate that protects against corrosion, cavitation, scaling and oxidisation in vehicles that do not require an Anti-Freeze Anti-Boil coolant. It is an effective engine coolant that uses a hybrid organic acid technology (HOAT) inhibitor to provide maximum protection against corrosion whilst providing superior heat transfer to significantly reduce engine operating temperature.

Coolant Test Strips NEW

Product Code	Pack Size	Carton Qty	Reserve Alkalinit: <3.0 - 10.1+ pH Range: <5.0 - 10.1+	Glycol Range: 0-60%
TSTRIPS	50	12	Penrite Coolant Test Strips are dispo	osable test strips for measuring

Penrite Coolant Test Strips are disposable test strips for measuring the concentration level and condition of Anti-Freeze Anti-Boil coolants used in all types of combustion engines. They effectively test the coolant's concentration as well as the pH level and alkalinity to determine when service of the coolant is necessary.



Radiator Stop Leak

Product Pack Carton Colour: Blue/Green
Code Size Qty Treat Rate: 375ml treats up to 12 litres

ADRSL375 375 Millilitres 6

Penrite Radiator Stop Leak is a high quality water based sealant designed for temporarily fixing leaking cooling systems. Its fast acting formulation effectively seals radiators, heater cores, weeping head gaskets, hose joints and welsh plugs in automotive engines preventing major damage from loss of coolant and engine overheating.

Radiator Flush

Product	Pack	Carton	Colour: Blue		
Code	Size	Qty	Treat Rate: 3		
ADRF375 ADRF020	375 Millilitres 20 Litres	6			

Treat Rate: 375ml treats up to 15 litres

Penrite Radiator Flush is a fast acting (7 minute), alkaline cooling system cleaner designed to remove rust, scale and other deposits from automotive cooling systems that could block or foul circulation of coolant though the radiator or engine.

PENRITE PRODUCT	Box	Milli	litres	Litres					
	50	375	500	1	2.5	5	20	60	205
8 Year 500,000km Red Concentrate	-	-	-	0	0	0	0	0	0
8 Year 500,000km Red Premix	-	-	-	0	-	0	-	-	0
7 Year 450,000km Green Concentrate	-	-	-	0	0	0	0	0	0
7 Year 450,000km Green Premix	-	-	-	0	-	0	0	-	0
7 Year 450,000km Blue Concentrate	-	-	-	0	-	0	0	-	0
7 Year 450,000km Blue Premix	-	-	-	0	-	0	-	-	-
350,000km Green Concentrate	-	-	-	0	0	0	0	0	0
350,000km Green Premix	-	-	-	0	-	0	-	-	-
Universal Coolant Top Up Premix	-	-	-	0	-	-	-	-	-
PGXL Coolant Premix (Propylene Glycol)	-	-	-	-	-	-	0	-	-
HD Longlife EC01 AFAB Concentrate	-	-	-	-	-	-	0	-	0
HD Longlife EC01 AFAB Premix	-	-	-	-	-	-	0	-	0
RCI 100 Concentrate	-	-	0	0	-	-	0	-	0
Classic Car Coolant Concentrate	-	-	-	0	-	-	-	-	-
10 Tenths Race Coolant Concentrate	-	-	-	0	-	-	-	-	-
Coolant Test Strips	0	-	-	-	-	-	-	-	-
Radiator Stop Leak	-	0	-	-	-	-	-	-	-
Radiator Flush	-	0	-	-	-	-	0	-	-

(All products are available in 1000L Pods, on request)

Key Features & Benefits of the Coolants range:

- > Many OEM Approved products, 100% guaranteed to meet vehicle warranty requirements.
- > Latest Si-OAT technology, Organic Acid Technology (OAT), Hybrid and Conventional coolant types.
- > Type A (Anti-Freeze Anti-Boil with corrosion inhibitor) and Type B (corrosion inhibitor only).
- > Conventional long life non approved coolants.
- > Ethylene and Propylene Glycol products available.
- > Available in concentrate and premix formulations.
- > Long Term Protection against rust and corrosion.
- > Freezing and Boiling protection.
- > Specialised products for Racing and Classic Vehicles.
- > Coolant Test Strips for workshops.
- > Retail and bulk sizes available.



Expert Tip: Always follow the manufacturer's recommendation, drain intervals and dilution rates.