



Donaldson Delivers

Thermo-Tech™ Heavy-Duty Coolant



THERMO-TECH™

THERMO-TECH™ HEAVY-DUTY COOLANT

Donaldson's Thermo-Tech™ range covers all of your fleets coolant needs, including conventional heavy duty technologies, environmentally friendly organic product, and our superior long life propylene glycol hybrid offering.



Thermo-Tech™ technology provides superior engine protection in the harshest environments.

Our coolants provide complete protection for all types of diesel, petrol and gas engines and are suited to a wide variety of applications including:

- Heavy-duty mining vehicles
- On-road heavy, medium and light-duty trucks
- Off-road, agriculture and construction equipment
- 4WDs (petrol & diesel)
- All passenger vehicles

Modern engines produce vast amounts of heat. Cooling system maintenance is critical.

Industry estimates indicate that up to 40% of engine downtime is due to cooling system failures.

Your engine coolant may battle rust, scale formation, acidity, foaming, silicate dropout and debris while it works to transfer heat and maintain the correct operating conditions for optimal engine performance.

Donaldson is a brand that you can trust to provide the best care for your engine. Our products work as hard as you do. For more information on Donaldson Thermo-Tech™ products and access to Material Safety Data Sheets (MSDS) visit us at www.donaldsontoolbox.com.au

THERMO-TECH PG

6 YRS - 1,000,000 KMS - 12,000 HRS



Extended Life

Superior Corrosion Protection

Highly compatible with other coolants

For heavy-duty on and off-road applications

Thermo-Tech™ PG is the premium coolant in our range and (if required) is fully backwards compatible with all other Propylene Glycol (PG), Ethylene Glycol (EG) or Organic Acid Technology (OAT) coolants. It is designed for use with all types of diesel, petrol and gas engines and offers the following features:

- Premixed and ready to use
- Extended life without the need for supplemental coolant additives (SCA's)
- Lasts up to 5 years or 250,000 kilometres in 4WDs and passenger vehicles
- Lasts up to 6 years, 12,000 hours or 1,000,000 kilometres in heavy-duty applications
- Compatible with all other coolants (if being used as a top-up)
- Specially formulated to protect heavy-duty wet sleeve liners
- Hybrid technology has an outstanding track record in on- and off-road applications

standards

Donaldson Thermo-Tech PG coolants meet or exceed the following standards:

ASTM D-1287, D-1881, D-1121, D-92, D-1122, D-1119, D-1177, D-3306, D-4985, D-6210, D-6211, D-6257, D-3634

And can be used where the following specifications are quoted or stated:

- | | | | | |
|---------------------------------|---------------------------------|-------------------------|-------------|-----------------|
| • SAE J1034, J1941 | • CUMMINS SB 3666132, CES 14603 | • FREIGHTLINER 48-22880 | • PACCAR | • KOMATSU |
| • GM 1825M, 1899M | • JOHN DEERE 8650-5 | • US FED A-A-870-A | • VOLVO | • SAAB-SCANIA |
| • KENWORTH R026-170-97 | • MACK 014617004 | • WAUKESHA 4-1974D | • MTU | • MERCEDES BENZ |
| • CATERPILLAR (other than EC-1) | • PETERBILT 8502.002 | • MAN 324 SNF | • PERKINS | |
| • DAIMLER CHRYSLER MS 7170 | • CID-A-A52624 | • NAVISTAR CEMS B-1 | • IVECO | |
| • CASE NEW HOLLAND WSN-M97B18-D | • DETROIT DIESEL 7SE 298 | • EMD M.I. 1784E | • TOYOTA | |
| • FORD ESE-M97B44A, ESE-M97B18C | • DAF STANDARD MAT 74002 | • TMC RP 329 | • LANDROVER | |

Donaldson Thermo-Tech PG is available in:

	PREMIX	CONCENTRATE
5 Litres	P903106	-
20 Litres	P903107	-
205 Litres	P903108	-
1000 Litres	P903109	-

Contains 495g/L propylene glycol

THERMO-TECH EG

2 YRS - 320,000 KMS - 3,000 HRS



Low Silicate

Suitable for all engines

Superior corrosion protection

For heavy-duty on and off-road applications

Donaldson Thermo-Tech EG is an Ethylene Glycol based coolant designed for use with all types of diesel, petrol and gas engines. Thermo-Tech EG is a conventional coolant based on a proprietary formulation of corrosion inhibitors and offers the following features:

- No need for supplemental coolant additives (SCA's) upon initial refill when using premix
- Lasts up to 2 years, 3,000 hours or 320,000 kilometres in heavy-duty applications
- Lasts up to 3 years or 100,000 kilometres in 4WDs and passenger vehicles
- Compatible with other conventional coolants (if being used as a top-up)
- Specially formulated to protect heavy-duty wet sleeve liners

Donaldson Thermo-Tech EG is available in:

	PREMIX	CONCENTRATE
5 Litres	P903100	-
20 Litres	P903101	P903104
205 Litres	P903102	P903105
1000 Litres	P903103	-

Premix contains 545g/L ethylene glycol
Concentrate contains 1090g/L ethylene glycol

standards

Donaldson Thermo-Tech EG coolants meet or exceed the following standards:

ASTM D-1287, D-1881, D-1121, D-92, D-1122, D-1119, D-1177, D-3306, D-4985, D-6210, D-6211, D-6257, D-3634

And can be used where the following specifications are quoted or stated:

- | | | | | |
|---------------------------------|---------------------------------|-------------------------|-------------|-----------------|
| • SAE J1034, J1941 | • CUMMINS SB 3666132, CES 14603 | • FREIGHTLINER 48-22880 | • PACCAR | • KOMATSU |
| • GM 1825M, 1899M | • JOHN DEERE 8650-5 | • US FED A-A-870-A | • VOLVO | • SAAB-SCANIA |
| • KENWORTH R026-170-97 | • MACK 014617004 | • WAUKESHA 4-1974D | • MTU | • MERCEDES BENZ |
| • CATERPILLAR (other than EC-1) | • PETERBILT 8502.002 | • MAN 324 SNF | • PERKINS | |
| • DAIMLER CHRYSLER MS 7170 | • CID-A-A52624 | • NAVISTAR CEMS B-1 | • IVECO | |
| • CASE NEW HOLLAND WSN-M97B18-D | • DETROIT DIESEL 7SE 298 | • EMD M.I. 1784E | • TOYOTA | |
| • FORD ESE-M97B44A, ESE-M97B18C | • DAF STANDARD MAT 74002 | • TMC RP 329 | • LANDROVER | |

THERMO-TECH OAT

4 YRS - 1,000,000 KMS - 12,000 HRS



Extended Life

Suitable for all engines

Superior corrosion protection

Compatible with other OAT coolants

Donaldson Thermo-Tech OAT (Organic Acid Technology) is a water based coolant designed for use with all types of diesel, petrol and gas engines. Thermo-Tech OAT is a glycol free coolant based on a proprietary formulation of corrosion inhibitors & offers the following features:

- No need for supplemental coolant additives (SCAs) when using premix
- Lasts up to 4 years, 12,000 hours or 1,000,000 kilometres in heavy-duty applications
- Lasts up to 3 years or 100,000 kilometres in 4WDs and passenger vehicles
- Specially formulated to protect heavy-duty wet sleeve liners
- Organic formula is free from glycol, amine, borate, phosphate, nitrates, nitrites & silicate
- Compatible with other organic coolants (if being used as a top-up)

standards

Donaldson Thermo-Tech OAT coolants meet or exceed the following standards:
ASTM D-3306, ASTM D-4985, AS/NZS 2108:2004 "Type B", SAE J1034 / J1941

And can be used where the following specifications are quoted or stated:

- | | | | | |
|---------------------------------|----------------------------|-------------------------|---------------|-----------------|
| • SAE J1034, J1941 | • DAIMLER CHRYSLER MS 7170 | • TMC RP 329 | • PACCAR | • LANDROVER |
| • GM 1825M, 1899M | • JOHN DEERE 8650-5 | • CID-A-A52624 | • VOLVO | • KOMATSU |
| • KENWORTH R026-170-97 | • MACK 014617004 | • FREIGHTLINER 48-22880 | • MTU | • MERCEDES BENZ |
| • CATERPILLAR (other than EC-1) | • PETERBILT 8502.002 | • WAUKESHA 4-1974D | • PERKINS | |
| • CUMMINS SB 3666132, CES 14603 | • DAF STANDARD MAT 74002 | • MAN 324 SNF | • SAAB-SCANIA | |
| • CASE NEW HOLLAND WSN-M97B18-D | • DETROIT DIESEL 7SE 298 | • NAVISTAR CEMS B-1 | • IVECO | |
| • FORD ESE-M97B44A, ESE-M97B18C | • US FED A-A-870-A | • EMD M.I. 1784E | • TOYOTA | |

Donaldson Thermo-Tech OAT is available in:

	PREMIX	CONCENTRATE
5 Litres	P903110	-
20 Litres	P903111	P903114
205 Litres	P903112	P903115
1000 Litres	P903113	-

THERMO-TECH

RADIATOR FLUSH



Non-acidic

Removes rust and scale

Compatible with all coolant types

For heavy-duty on and off-road applications

Donaldson Thermo-Tech Radiator Flush is a engine cooling system cleaner designed for use with all types of diesel, petrol and gas engines. Thermo-Tech Radiator Flush is a non-acidic, alkaline-based cleaner offering the following features:

- Removal of rust and scale
- Compatible with all coolant types
- Suitable for heavy-duty on and off-road applications

Thermo-Tech Radiator Flush is available in:

RADIATOR FLUSH	
5 Litres	P903116
20 Litres	P903117
205 Litres	-
1000 Litres	-

Contains 140g/L alkaline salts



Donaldson test kits offer a quick, one-minute test that helps you maintain that cooling system balance. Coolant system testing should be done at least twice a year or when major coolant loss occurs.

DONALDSON TEST STRIPS

4 Strip Test Pack

[P901874](#)

THERMO-TECH FAQ



What does engine coolant do?

The primary function of a coolant is to transfer heat from the engine. Whilst pure water has excellent heat transfer properties it may promote the build-up of scale or deposits within the cooling system and provide an environment that promotes corrosion and liner cavitation. Quality inhibitor packages provide corrosion protection and prevent liner cavitation. The addition of glycol to a coolant provides boil over and anti-freeze protection.

Are all coolants the same? If not, what is the difference?

No, all coolants are not the same. High quality coolants meet engine manufacturer's coolant performance standards for automotive and heavy-duty diesel applications. The glycol content, inhibitor packages, anti-foam agents, scale inhibitors, and heat transfer properties may vary between suppliers, all have an impact upon coolants service life and performance. The Donaldson range meets major industry and engine manufacture engine coolant performance requirements, along with Australian Standard AS-2108-2004 for Type A Coolants.

Why do I need a quality formulated coolant?

High quality coolants provide superior corrosion and cavitation protection for cooling systems. Modern engines are becoming lighter, more efficient and operating at higher temperatures. Engineered coolants are required to ensure the maximum protection of your engine.

How do I change the engine coolant?

Read and follow product labelling for handling guidelines. Drain engine-cooling system, refill and flush thoroughly with Donaldson Thermo-Tech Radiator Flush or clean water. Always refill and flush system with clean water after using radiator flush. Fill cooling system with premixed engine coolant. If you are mixing concentrated coolant, always use good quality water (de-ionised water is preferable). After the engine has been brought to operating temperature, re-check that the coolant level is correct. All radiator and header tank top-ups should be with pre-mixed coolant. Coolant should not be diluted below recommended concentration or mixed with other coolants. If spilled onto paintwork, flush immediately with water.

When do I change my engine coolant?

1. After any repairs or replacement to any engine cooling system component
2. When the coolant has been contaminated or topped up with water
3. When the warranty period of the coolant has expired
4. When the ethylene glycol and inhibitor level has depleted

Can I mix Coolants?

If coolants are mixed, corrosion inhibitor stability and performance may be affected. Certain hybrid coolants are fully backward compatible with Organic and Conventional coolants. It is not recommended to mix coolants of unknown chemistries. In the event of an emergency, diluting the system with quality water may prove less costly than the use of a non-compatible coolant. If topping up over 20% a full flush and coolant replacement is recommended. Some coolants cannot be mixed. Refer to the table below.

GUIDE TO MIXING COOLANTS		EXISTING COOLANT		
		HYBRID	O.A.T	CONVENTIONAL
MIX WITH	HYBRID	YES	NO	NO
	O.A.T	YES	YES	NO
	CONVENTIONAL	YES	NO	YES

Why can't I use tap water?

Water does not contain any corrosion inhibitors and will result in corrosion, liner cavitation and scale formation. Additionally, it does not possess the boil over and freeze protection provided by a glycol coolant. Water top-ups dilute the corrosion inhibitor package, lowering the cooling systems protection. Pre-mixed coolants should always be used to top up a system.

How should I dispose of my old coolant?

To protect the environment, dispose of used coolant in a safe manner or as advised by the Environmental Protection Agency.



Did you know?
Aged or poor quality radiator caps can prevent your cooling system from being adequately pressurised lowering the boiling point of your system. Always ensure that the radiator cap is in optimum condition or replace as necessary.

Global Presence with Local Touch

Donaldson has established a global distribution network to serve our customers locally as well as worldwide. We operate as a global company with a network of primary distribution locations that support a mature hub of regional distribution centers and warehouses.

Donaldson distribution centers are strategically located to quickly and accurately deliver filtration and exhaust products wherever replacement products are needed. We work with a network of transportation, third party logistics companies, consolidators and cross-docking facilities to meet or exceed our customers' requirements.

All regions of the world benefit from our global umbrella of distribution centers. We focus our efforts on local support and the capabilities of our staff. We continue to make significant investments in facilities, systems, supply chain relationships and staffing to offer the best order fulfilment options available.



Donaldson.
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