

CHEVRON HEAVY DUTY PF ANTIFREEZE/COOLANT

PRODUCT DESCRIPTION

Chevron Heavy Duty PF Antifreeze/Coolant is a singlephase, ethylene glycol based fully formulated, heavyduty diesel engine coolant/antifreeze that is available as a concentrate and a 50/50 pre-dilute.

CUSTOMER BENEFITS

Chevron Heavy Duty PF Antifreeze/Coolant delivers value through:

- Wide Service Application Suitable for gasoline, diesel, and natural gas powered automotive and industrial engines.
- **Beneficial Formulation** Formulated with nitrite and molybdate to protect against wet cylinder liner pitting. Outstanding corrosion protection for aluminum, brass, cast iron, steel, solder, and copper phosphate-free formula helps reduce hard water scale formation.
- Ease of Maintenance No initial requirement for a pre-charge dose of SCA and reduced SCA use during life of coolant with continued use of this product for top-up.
- **Compatibility** Formulation is compatible with other fully formulated coolants that are phosphate free, low silicate and that contain molybdate and nitrite for cylinder liner protection. Compatible with commercially available supplemental coolant additives in both filter and liquid form.
- Long Service Life Recommended service life of 200,000 miles to 250,000 miles (320,000 km to 400,000 km) with correct top-up and SCA additions.
- Wide Temperature applications Protects against winter freeze up and minimizes the chance of summer boil over.

 Multiple colors — Due to a variety of colors available for fully formulated coolant/antifreeze products in the marketplace we make these products available in a purple or green color.

FEATURES

Chevron Heavy Duty PF Antifreeze/Coolant products are recommended for use in on-road, off-road and stationary applications where a fully formulated, nonextended life coolant is recommended by the OEM.

Chevron Heavy Duty PF Antifreeze/Coolant products contain an effective inhibitor package that protects cooling system metals and components against erosion, corrosion and cavitation.

Chevron Heavy Duty PF Antifreeze/Coolant products are phosphate free which helps reduce the occurrence of hard water scale formation.

Note: This product is not to be used to protect the inside of potable water systems against freezing.

APPLICATIONS

Recommended applications for Chevron Heavy Duty PF Antifreeze/Coolant:¹

- On-road, Off-road and Stationary engines regardless of fuel type.
- Mixed fleet operations calling for a coolant antifreeze that meets ASTM D3306, TMC RP 329 or ASTM D6210

Chevron Heavy Duty PF Antifreeze/Coolant products meet or exceed the requirements of:

- ASTM D3306 and ASTM D6210
- TMC RP 329 and RP-302

1 Follow your OEM's recommendations. Some OEM's recommend the use of extended life silicate free coolants.

Product(s) manufactured in the USA.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.

A Chevron company product

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Chevron Heavy Duty PF Antifreeze/Coolant is recommended for use in most heavy duty and light duty engine applications including:

- Caterpillar
- Cummins
- Detroit Diesel
- Ford (requiring ESE-M97B44-A)
- Freightliner
- General Motors
- International
- J.I. Case JIC501
- John Deere
- Mack Truck
- **PACCAR** (Peterbilt and Kenworth)
- Volvo

PRODUCT DILUTION AND BOIL OVER PROTECTION RECOMMEDATIONS FOR CHEVRON HEAVY DUTY PF ANTIFREEZE/COOLANT - CONCENTRATE

Boiling Protection, °F/°C (15 lb pressure cap) 50% 1:1 (1 part antifreeze/1 part water)	265/129
Freezing Protection, °F/°C 40% 2:3 (2 parts antifreeze/3 parts water) 50% 1:1 (1 part antifreeze/1 part water) 60% 3:2 (3 parts antifreeze/2 parts water)	-12/-24 -34/-37 -62/-52

Notes:

- Product concentrates should be mixed before use or dilution.
- 50/50 Pre-diluted products should be used as purchased.
- For maximum protection against freezing in extremely cold areas, a 60 percent solution (3 parts antifreeze/2 parts water) can be used.
 Concentrations greater than 67percent are not recommended.
- Always dispose of used coolant/antifreeze in accordance with all local, state and federal regulations.

PRODUCT REFERENCE

Note: Bitterant is a flavor aversive that may help reduce the accidental ingestion of this product. These products contain bitterant.

Product Number 227043 SDS Number 12144 Chevron Heavy Duty PF Antifreeze/Coolant -Concentrate

Product Number 275114 SDS Number 23730 Chevron Heavy Duty PF Green Antifreeze/Coolant -Concentrate

Product Number 227045 SDS Number 12146 Chevron Heavy Duty PF Antifreeze/Coolant - Premixed 50/50

Product Number 275113 SDS Number 23726 Chevron Heavy Duty PF Green Antifreeze/Coolant -Premixed 50/50

TYPICAL TEST DATA

CHEVRON HEAVY DUTY PF ANTIFREEZE/COOLANT - CONCENTRATE

Appearance	Purple or Green
Specific gravity 15/15°C	1.12
Freezing point, °F/°C ^a , ASTM D1177	-34/-37
pH ^b , ASTM D1287	10.5
Reserve alkalinity ^c , ASTM D1121	8.5
Silicate, % ^d	0.025

a 50 vol % aqueous solution.

b 1:2 dilution with water.

c As received.

d As anhydrous alkali metasilicate.

Minor variations in product typical test data are to be expected in normal manufacturing.

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Chevron Heavy Duty PF Antifreeze/Coolant ASTM D1384 Glassware Corrosion Test

	ASTM Limit	Weight loss, mg per coupon ^a
Copper	10 max	0
Solder	30 max	3
Brass	10 max	0
Steel	10 max	0
Iron	10 max	-1
Aluminum	30 max	-3

a Negative indicates net gain.

HANDLING PRACTICES

Product shelf life is 18 months. Product service life is 200,000 miles to 250,000 miles, 320,000 km to 400,000 km, 5000 hours or 2 ½ years. Product should be agitated before use if it has been standing for an extended period.

Always confirm that the product selected is consistent with the original equipment manufacturer's recommendation for the equipment operating conditions and customer's maintenance practices.