



CONVENTIONAL AUTOMOTIVE

ANTIFREEZE / COOLANT

PRODUCT #230

DESCRIPTION:

Crystal Clean Conventional Automotive, prediluted, 50/50 antifreeze/coolant is ready to add to your vehicle cooling system for automotive or other light-duty use with no further dilution necessary. With technology designed for older vehicles using conventional coolant, it contains a phosphate free, inhibitor package that provides excellent all metal protection. In automobiles, light trucks, SUV's, vans and other light duty applications, this product can provide a service life of 2-3 years or up to 50,000 miles.

Crystal Clean Conventional Automotive antifreeze/coolant contains a well-balanced inhibitor system that provides great protection for all cooling system metal components. The product provides year-round protection against freeze-ups, boil-overs and engine cooling system corrosion. This antifreeze/coolant also includes ingredients to disperse minor oil leakage, prevent fouling, control hot surface scaling and it will not damage auto finishes or rubber parts.

BENEFITS:

- Meets the performance requirements of ASTM D3306
- Ready-to-use prediluted 50/50
- Protects all system metals.
- In light-duty vehicles it will perform for up to 3 years or 50,000 miles with complete drain, flush, and refill.
- Green in color.

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
Ash content, mass %	1.1	D1119
pH (50% V/V)	10.3	D1287
Reserve alkalinity*	5.0	D1121
Color	Green	--

Suitable for use in older passenger cars and light duty trucks (generally pre-2002) which require a conventional antifreeze/coolant. Reference owners manual for proper application

- Chrysler
- Ford
- General Motors
- Other applications following owners manual

This product contains a limited warranty. Please visit <https://www.crystal-clean.com/af-warranty> for full details. Follow OEM recommendations for specified maintenance.

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap





HEAVY DUTY CONVENTIONAL

ANTIFREEZE / COOLANT

PRODUCT #232

DESCRIPTION:

Crystal Clean Heavy Duty Conventional antifreeze/coolant is fully formulated and ready to add to your vehicle's cooling system with no further dilution necessary. It is formulated with a heavy-duty additive package that contains the initial charge of supplemental coolant additive (SCA) and a minimum of 1200 ppm Nitrite (as NO₂). It provides excellent protection from cavitation erosion/corrosion in water pumps and wet sleeve cylinder liners, as well as excellent overall corrosion protection for multi-metal systems.

This antifreeze/coolant includes ingredients to disperse minor oil leakage, prevent fouling, control hot surface scaling and it will not damage vehicle finishes or rubber parts.

In systems where coolant filtration is in place along with a formal monitoring and maintenance program, the coolant can provide up to 3 years/300,000 miles with the addition of heavy-duty supplemental coolant additive as needed. Monitoring and maintenance of the engine coolant should include regular testing at normal oil drain intervals.

BENEFITS:

- Meets the performance requirements of ASTM D6210, ASTM D3306, and RP329
- Works in all heavy-duty diesel and compressed natural gas engine cooling systems requiring conventionally inhibited HD coolants.
- Low silicate formulation meeting ASTM D4985.
- Phosphate-free formula reduces the risk of hot surface scaling.
- Ready-to-use prediluted 50/50
- Available in pink or green color.

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
Ash content, mass %	1.1	D1119
pH (50% V/V)	10.3	D1287
Reserve alkalinity*	5.0	D1121
Color	Pink / Green	--

Recommended for, but not limited to, use in the following heavy duty applications:

- Detroit Diesel Corp
- Peterbilt
- Komatsu
- John Deere
- General Motors
- Freightliner
- International Truck
- Ford Motor Co
- Volvo / Mack Trucks
- Mercedes
- Kenworth
- Cummins
- Caterpillar

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap

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HEAVY DUTY GLOBAL

NITRITE-FREE OAT
EXTENDED LIFE ANTIFREEZE/COOLANT

PRODUCT #234

DESCRIPTION:

Crystal Clean Heavy Duty Global is an OAT (organic acid technology), extended life antifreeze designed for mixed fleet use. This is a premium product specifically designed to protect aluminum alloys being used in today's high-performance cooling systems. It is formulated to provide superior corrosion protection and durability under the more demanding conditions of higher combustion temperatures and cylinder pressures of the latest low emission engines. Formulated for heavy-duty diesel engine cooling systems (on-road or off-road) but can also be used in any light-duty (cars, SUV's and light-duty trucks) application.

Crystal Clean Heavy Duty Global is a pure OAT formulation that does not contain any conventional inorganic salts. Formulated to be free of nitrite, nitrate, silicate, phosphate and borate. It provides outstanding cylinder liner cavitation/pitting protection. It is compatible with all major brands of coolants without precipitation problems under typical top off quantities.

BENEFITS:

- Meets the performance requirements of ASTM D6210, ASTM D3306, RP364, and RP338A
- Ready-to-use prediluted 50/50
- In HD applications, performance beyond 12,000 hours/600,000 miles in well maintained systems.
- Yellow color is neutral and will not alter the original color of the coolant if topping off.
- Protects all system metals.
- Also available in red color.

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
Ash content, mass %	1.1	D1119
pH (50% V/V)	8.5	D1287
Reserve alkalinity*	4 mL	D1121
Color	Yellow or Red	--

Recommended for use in the following heavy duty on road and stationary engines including:

- Detroit Diesel Corp
- Komatsu
- General Motors
- International Truck
- Volvo / Mack Trucks
- Kenworth
- Caterpillar
- Peterbilt
- John Deere
- Freightliner
- Ford Motor Co
- Mercedes

This product contains a limited warranty. Please visit <https://www.crystal-clean.com/af-warranty> for full details. Follow OEM recommendations for specified maintenance.

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap





LIGHT DUTY GLOBAL

NITRITE-FREE OAT
EXTENDED LIFE ANTIFREEZE/COOLANT

PRODUCT #235

DESCRIPTION:

Crystal Clean Light Duty Global antifreeze/coolant contains a pure organic acid technology (OAT) inhibitor system that is significantly more durable than conventional additive systems for automotive, light duty use, resulting in up to 5-year/150,000 mile service life. The antifreeze is suitable for use in foreign and domestic passenger cars, vans, SUVs and light trucks requiring extended life antifreeze.

The inhibitor technology used in this extended life antifreeze/coolant contains no borate, nitrate, nitrite, phosphates, silicates, or amines. It is compatible with all major brands of OAT, hybrid and conventional coolants without precipitation problems under typical top off quantities. However, mixing different coolant types should be avoided because it will shorten the life of the "mixed" coolant.

Additionally, this antifreeze/coolant contains inhibitors that protect all cooling system metals. Together with the glycol base, these inhibitors and other additives, give year-round protection against freeze-ups, boil-overs and engine cooling system corrosion.

BENEFITS:

- Meets the performance requirements of ASTM D3306
- Compatible for use in all cars, light duty trucks, and motor cycles
- Ready-to-use prediluted 50/50
- Yellow color is neutral and will not alter the original color of the coolant.

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
pH (50% V/V)	8.5	D1287
Reserve alkalinity*	3 mL	D1121
Color	Yellow	--

Recommended for, but not limited to, use in the following light duty applications:

- General Motors
- Mitsubishi
- Toyota
- Kia
- Chrysler
- Nissan
- Volkswagen
- Ford Motor Co
- Hyundai
- Mercedes
- Audi
- BMW

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap

This product contains a limited warranty. Please visit <https://www.crystal-clean.com/af-warranty> for full details. Follow OEM recommendations for specified maintenance.





DEXCOOL

EXTENDED LIFE ANTIFREEZE / COOLANT

PRODUCT #236

DESCRIPTION:

Crystal Clean DEX-COOL is a General Motors licensed DEX-COOL® Antifreeze/Coolant. Crystal Clean DEX-COOL® complies with GWM3420 (formerly GM6277M) specifications and is approved for warranty work at GMSPO dealer pricing for new coolant. Crystal Clean DEX-COOL® has a service life of 5 years/150,000 miles and meets ASTM D3306 performance specifications.

Crystal Clean is the only antifreeze/coolant recycling company in United States with a General Motors approval for the DEX-COOL® product. See GM Service Bulletin # 00-06-02-006D.

BENEFITS:

- Meets the performance requirements of ASTM D3306
- Compatible for use in all cars, light duty trucks, and motor cycles
- Ready-to-use prediluted 50/50
- Approved for use under warranty— see GM Service Bulletin #00-06-02-006D
- Orange in color

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
Ash content, mass %	1.1	D1119
pH (50% V/V)	8.5	D1287
Reserve alkalinity*	3 mL	D1121
Color	Orange	--

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap

Compatible with the following Light Duty applications:

- General Motors
- Mitsubishi
- Toyota
- Kia
- Chrysler
- Nissan
- Volkswagen
- Ford Motor Co
- Hyundai
- Mercedes
- Audi
- BMW

This product contains a limited warranty. Please visit <https://www.crystal-clean.com/af-warranty> for full details. Follow OEM recommendations for specified maintenance.





HEAVY DUTY NMOAT

EXTENDED LIFE ANTIFREEZE / COOLANT
WITH NITRITE AND MOLYBDATE

PRODUCT #237

DESCRIPTION:

Crystal Clean Heavy Duty NMOAT is prediluted, 50/50 antifreeze/coolant formulated with nitrite and molybdate for extra protection in heavy-duty diesel applications. It contains a well-balanced organic acid technology (OAT) inhibitor system that provides great protection for all cooling system metal components. The product provides year-round protection against freeze-ups, boil-overs and engine cooling system corrosion. This antifreeze/coolant also includes ingredients to disperse minor oil leakage, prevent fouling, and control hot surface scaling.

Crystal Clean Heavy Duty NMOAT eliminates the need for chemical filters and supplemental coolant additives (SCA's). Formulated to be free of phosphate, silicate, amine, and borate. It is compatible with other HD OAT coolants like CAT ELC (EC-1 specification).

BENEFITS:

- Meets the performance requirements of RP329, RP338A, RP364, ASTM D6210, ASTM D3306.
- Excellent protection against erosion corrosion by wet sleeve cylinder liner cavitation (liner pitting).
- Ready-to-use prediluted 50/50
- Red in color.
- Protects all system metals. In HD applications provides up to 600,000 miles on-highway or up to 12,000 hours off-road service where a well-established monitoring program is in place for testing coolant at least twice a year. Coolant Extender is generally needed at half-life (300,000 miles or 6000 hours) and may be added based on results from coolant sample analysis.

PREMIX 50/50

Characteristic	Company Typical	ASTM Method
Specific Gravity (60°F)	1.075	D1122
Boiling Point (50% V/V)	230°F**	D1120
Freezing Point (50% V/V)	-34°F	D1177
Ash content, mass %	1.1	D1119
pH (50% V/V)	8.5	D1287
Reserve alkalinity*	3 mL	D1121
Color	Red	--

Recommended for use in the following heavy duty on road and stationary engines including:

- Detroit Diesel Corp
- Komatsu
- General Motors
- International Truck
- Volvo / Mack Trucks
- Kenworth
- Caterpillar
- Peterbilt
- John Deere
- Freightliner
- Ford Motor Co
- Mercedes

This product contains a limited warranty. Please visit <https://www.crystal-clean.com/af-warranty> for full details. Follow OEM recommendations for specified maintenance.

*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

**Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap

