



SUBJECT: Long Life Engine Coolant

Department: Service
 Section: Engine Cooling
 Model(s): ALL
 Model Year(s): ALL
 Effective Date: October 1, 2013
 Form #: SNL-072
 Rev #:
 Supersedes:SNL-051 (REV.)

Purpose: To ensure that the Long Life Coolant (LLC) is mixed to the proper concentration level for UD Trucks to maintain optimal cooling performance and minimal cooling system component damage.

Requirements for 2011 and Later Model Years (Nitrite Free)

Concentration Level:

Boiling Protection, °C/°F (using a 15 lb pressure cap)	
50% 1:1 (1 part antifreeze/1 part water)	129.4/265
Freezing Protection, °C/°F	
50% 1:1 (1 part antifreeze/1 part water)	-36.7/-34

Properties & Specifications:

Appearance	Yellow
Physical state	Liquid
Odor	Slightly Sweet
Specific gravity 15/15°C	1.130
Solubility in water (weight, %)	100
pH ASTM D 1287	8.3
Reserve Alkalinity ASTM D1121	6
Silicate %	none
Freezing Point C ASTM D 1177	-37

Recommended Long Life Coolant (LLC) Protection and Maintenance

- 1) Maintain the above concentration level.
- 2) Use distilled water.
- 3) LLC service period is 48 month's or 320,000mi (500,000km) whichever occurs first.
- 4) Flush cooling system and replace the LLC after the service period.

NOTE: Do not mix brands of LLC or use tap water.

The above criteria must be met to ensure the integrity of the cooling system. If the criteria is not met it can cause a degradation in the systems cooling capacity and damage to the components of the system.

Approved Nitrate Free Coolants such as listed below or equivalent:

Concentrate	Supplier	Part #
	Volvo	CHO227070GALLON
	Chevron	227070

50/50 Prediluted	Supplier	Part #
	Volvo	CHO227071GALLON
	Chevron	227071

The Information contained in this bulletin should not be interpreted as the basis for a warranty claim.



UD TRUCKS

North America

Requirements for 2010 and Prior Model Years (Phosphate Free)

Concentration Level:

Boiling Protection, °C(°F) (15 lb pressure cap)	
50% 1:1(1 part antifreeze/1 part water)	129.4 (265)
Freezing Protection, °C(°F)	
50% 1:1(1 part antifreeze/1 part water)	-36.7(-34)

Properties & Specifications:

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

Recommended Long Life Coolant (LLC) Protection and Maintenance

- 1) Maintain the above concentration level.
- 2) Use distilled water.
- 3) LLC service period is 48 month's or 200,000mi (320,000km) whichever occurs first.
- 4) Flush cooling system and replace the LLC after the service period.

NOTE: Do not mix brands of LLC or use tap water.

The above criteria must be met to ensure the integrity of the cooling system. If the criteria is not met it can cause a degradation in the systems cooling capacity and damage to the components of the system.

Approved Phosphate Free Coolants such as listed below or equivalent:

Concentrate	Supplier	Part #
	Chevron	227036

50/50 Prediluted	Supplier	Part#
	Chevron	227034

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