

PEPA1056

GENUINE COOLANT



KOMATSU

High-performance Long-life Coolant with Low Impact on Global Environment

Coolant selection has significant implications.

The life of your engine and radiator heavily depends on what coolant you select.

Enhanced with special additives for heavy-duty construction machinery, Komatsu Genuine Super Coolant is a non-amine/non-nitrite type, high-performance coolant that satisfies Komatsu's in-house standards. It can be used for two years and protects the cooling system from corrosion and cavitation etc..



Stable non-freezing performance that can withstand the winter season or the climate in very cold districts

With high-quality ethylene glycol contained, this coolant demonstrates stable non-freezing performance over a long period, preventing freezing trouble.

● Properties

Product name	Item	Color	Anti-corrosion	Cylinder liner protection performance	Replacement interval
Super Coolant AF-NAC		Blue	For all metals (steel, aluminum, solder, etc.)	Very high	Two years or 4,000 hours

Note: Komatsu Genuine Super Coolant eliminates the need for corrosion resistor. ※For details, see the instruction manual.

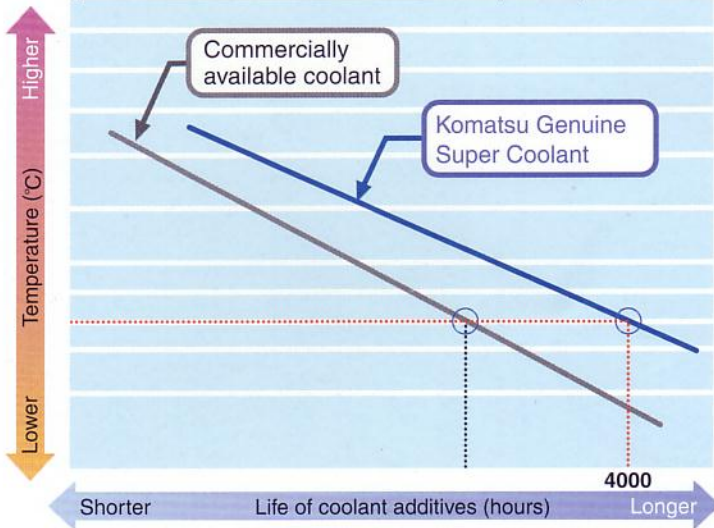
Characteristics of Komatsu Genuine Super Coolant

1 Sustaining robust rust and Anti-corrosion

When used over for extensive periods, coolant additives deteriorate because of heat and oxidation, degrading the coolant's performance.

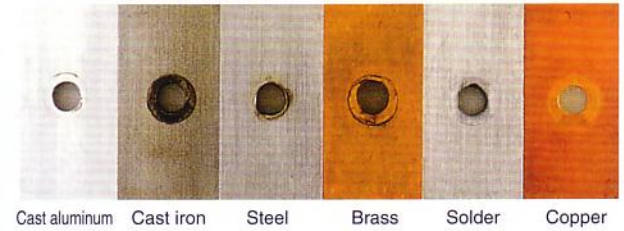
The Komatsu genuine coolant contains highly heat-resistant long-life additives to achieve long-standing robust rust and anti-corrosion, and can prevent corrosion any kinds of trouble in the cooling system.

Life of Coolant Additives by Temperature (based on Komatsu's in-house data comparison)

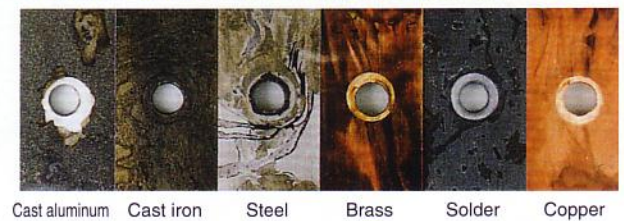


Metal corrosion tests (conforming to the JIS K2234 tests)

● Komatsu Genuine Super Coolant (coolant: 30%, artificial corrosive water: 70%)



● Blended solution (artificial corrosive water)



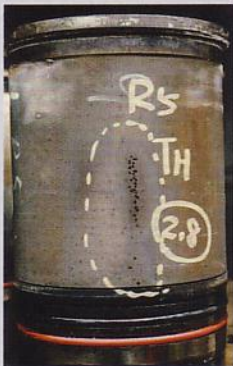
2 Excellent performance to prevent cavitation

With special additives blended in, this coolant suppresses cavitation damage to the cylinder liner or water pump that might otherwise cause engine trouble. In addition, it extends the life of each component of the cooling system.

Results of benchmark tests at Komatsu

Commercially available coolant

Komatsu Super Coolant



Cavitation has occurred.



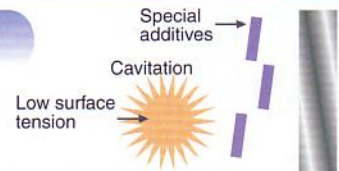
No cavitation has occurred.

Cavitation-resistance has been significantly improved.

Cavitation-Preventing Mechanism with Komatsu Genuine Super Coolant - Schematic Diagram

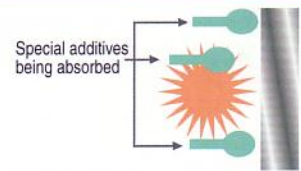
Viscosity and surface tension

● Special additives reduce the destructive force of air bubbles.



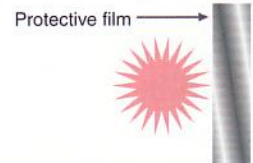
Adsorption of additives

● Special additives are absorbed to form a protective film on the metal surface.



Protective film

● The protective film formed protects the metal surface.



3 Significant effect of preventing scale generation

With special scale-preventive additives working, this coolant greatly contributes to reduction of clogging problems with cooling system.

Upper surface of a radiator that uses Commercially available coolant and hard water



Scales are completely clogging the radiator.

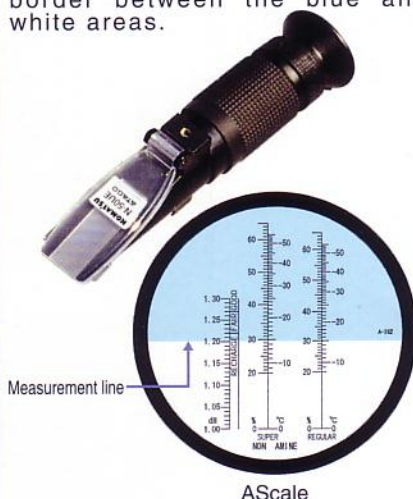
GENUINE COOLANT

Ambient temperature and coolant concentration

Ambient temperature °C	Concentration %
-10	30
-15	36
-20	41
-25	46
-30	50
-35	54
-40	58
-45	61
-50	64

Use a coolant tester to check the concentration.

Dribble a few drops of coolant on a coolant tester's prism side. Close the illumination plate, and then read the value for the concentration on the central scale shown in the figure below. The measurement line falls on the border between the blue and white areas.



Parts No. 795-500-2000

Water hardness checker

Use soft water with a total hardness of 100 mg/liter or lower for diluting water. Use the checker as shown below to measure water hardness.



① Put about 100 cc of the specimen water into a container.



② Pull the pin on the tube containing the reagent to make a hole in the tube.



③ Put the tube into the water with the hole facing down while securely holding the tube with your fingers.

④ Release the tension of the fingers to let the tube suck in some of the water.

⑤ Compare the color of the water in the tube with the reference colors to determine the hardness.

Parts No. 799-609-2500

※For details on the coolant tester and the water hardness checker above, contact the distributor nearest you.

Specifications

Product Name	Parts No.	Color	Packaging
Super Coolant AF-NAC	Class-3 Non-Amine	Blue	4-liter can
			18-liter can
			200-liter drum

Precautions for Use

1. Avoid blending Komatsu Genuine Super Coolant and other coolant brands.
2. Use the coolant at a concentration appropriate for the ambient temperature at which the subject machine will operate. However, in order to maintain the design rust and corrosion resistance, use the coolant at a concentration of 30% or higher.
3. Do not add too much coolant; a concentration of 65% or higher has the opposite effect of increasing the freezing temperature.
4. Use soft water for diluting the coolant.

● The specifications are subject to change without prior notice for improvement purposes. The photos included in this brochure may differ from the products actually sold. For details on precautions for using this product, see the operation manual.

● PLEASE CONTACT:

KOMATSU