

COOLTREAT AL 25 LTR

NALFLEET™ Cooltreat AL™ is an organic liquid corrosion inhibitor with extended life for use in closed engine cooling water treatment. This product offers protection for all commonly used materials in engine cooling water systems, including aluminium.



Product information

NALFLEET™ Cooltreat AL does not contain components subject to rapid depletion i.e. Nitrite and Silicate. Based on aliphatic acid technology NALFLEET™ Cooltreat AL is stable and hence the test frequency can be reduced. NALFLEET™ Cooltreat AL is fully organic and biodegradable.

Features

- Effective against cavitation and erosion. Superior heat transfer properties
- Compatible with hoses, gaskets and seals
- Compatible with glycols for frost protection
- Stable product-non depleting
- Environmentally friendly, fully organic product, low toxicity

Benefits

- The product can be used for corrosion inhibition in many types of closed re-circulation system (examples: Diesel engine/Compressor/Centralised Hot water heating systems/Auxiliary machinery cooling water systems)

Specification

General

Invent Hazard Material (IMO/EU) classification	C-7
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Physical properties

Appearance	Colourless
Density [g/ml]	1.06
Form	Liquid
pH	9.4

Approvals

Approved by all major engine manufacturers

Directions for use

NALFLEET™ Cooltreat AL is a highly effective corrosion inhibitor for all common metals in cooling water systems. Testing has shown no detrimental effects on non metallic substances such as seals, glands, packing, hoses, gaskets etc., normally used in these systems. Where most traditional inhibitors react with the metal surface and form oxides that prevent further corrosion, NALFLEET™ Cooltreat AL applies a thin and durable layer of protective molecules to the metal surfaces. This technology prevents the continuous build-up of insulating layers on heat transfer surfaces. For new builds, Wilhelmsen Ships Service recommends cleaning of the water system before commencing service. The system will always contain small amounts of oil and iron oxides, and this can be removed in one operation with UNITOR™ Commissioning Cleaner. If the system is corroded or is more heavily contaminated, degreasing with i.e. UNITOR™ Seaclean Plus followed by acid cleaning, with i.e. UNITOR™ Descalex for removal of metal oxides or scale is recommended. For systems previously treated with other products, Wilhelmsen Ships Service recommend to drain and flush the system before refilling with distilled water and NALFLEET™ Cooltreat AL. The system should be clean and free from scale and corrosion products when starting the treatment. The use of antifreeze is sometimes required if the vessel is to be laid up in cold areas, NALFLEET™ Cooltreat AL can be used in conjunction with glycols for frost protection. If used in conjunction with glycols, It is recommended to increase the product concentration to 8%.

For general guidance where aluminium is present:

No aluminium present - Use Rocor NB Liquid or Engine Water Treatment 9-108

With aluminium- Use NALFLEET 2000 or Cooltreat AL

Dosing method

NALFLEET™ Cooltreat AL should be dosed to a suitable point in the system. If the expansion tank is used, adequate circulation must be assured.

Sampling and testing

The Spectrapak Test Kit provides the necessary equipment to carry out the control tests. Obtain a representative sample of the cooling water. Carry out the tests immediately after sampling (following the instructions given in the Test Kit) and log the results in Waterproof. The results should be sent to WSS as stated in the Waterproof instructions. Use the dosage chart overleaf to adjust treatment to obtain the optimum level. It is important that testing is carried out at least once per week, to ensure levels of treatment are correct.

Dosage and Control

Initial dosage for an untreated system is 60 litres of NALFLEET™ Cooltreat AL/ton of untreated distilled water (6%). This will provide sufficient protection of the system for a period of two to five years under normal conditions.

Cooltreat AL (in %)	0	1	2	3	4	5	6
NALFLEET™ Cooltreat AL/1000 ltr	60	50	40	30	20	10	0

6% NALFLEET™ Cooltreat AL should also be dosed in all make up water added to the system to compensate for lost coolant. The engine manufacturer's recommendations for water quality should always be complied with. Chloride levels should always be as low as possible. Most engine manufacturers recommend a maximum of 50 ppm chlorides. For this reason, Wilhelmsen Ships Service recommends the use of distilled water as make-up. pH should be controlled between 7.0 and 9.0.

Authorised Resellers For India:

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