

# NCLT

Cooling Water Treatment for Closed Recirculating Water Systems

*Improved Formula*

## Technical Information

### Physical Data

Appearance:	Pale Yellow Liquid
Specific gravity:	1.275 kg x liter
pH in 1% sol. water:	9 ± 0,5
Corrosion action:	None
Contains:	Sodium Nitrite

### Description

This marine chemical product is Sodium/Nitrite/Borate-based and contains organic corrosion inhibitors.

### Advantages

- ▶ Highly effective anodic inhibitor treatment for comprehensive metal surface corrosion protection.
- ▶ Deposits a microscopic protective film on pipework and component surfaces, including multi-metal cooling systems.
- ▶ Enhances the stability of the protective film with integrated pH buffering compounds.
- ▶ Contains specific corrosion inhibitors to safeguard both ferrous and non-ferrous metals.
- ▶ Controls the formation of hard scale deposits, even in cases of raw water leaks in the system.
- ▶ Non-chromate product, eliminating pollution concerns associated with chromates.
- ▶ Safe for non-metallic substances such as seals, glands, packing, hoses, gaskets, etc., and compatible with all Glycol-based antifreeze types.

### Applications

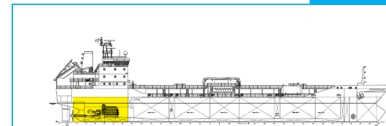
Corrosion inhibiting treatment for closed recirculating water systems, including:

- ▶ Diesel engine cooling water systems.
- ▶ Compressor cooling water systems.
- ▶ Centralized cooling systems.
- ▶ Central heating systems.
- ▶ Freshwater ballast tanks, etc.

### Direction For Use - Product Dose

Determine the quantity of treatment required for the system using the product dosage chart below. Note: Sacrificial anodes (magnesium or zinc) and galvanized coatings inside the cooling water system must be removed before adding NCLT. These materials are unnecessary in the treated system and can cause undesirable deposits if left in place. For additional information, please consult your local Uniservice Unisafe representative.

#### USAGE AREAS



Water Treatment

#### PACKAGING



#### APPROVALS



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Dosage Chart	
Nitrite (NO <sub>2</sub> ) ppm	NCLT l/m <sup>3</sup>
Initial Dose	12.0
200	11.7
400	10.0
600	7.2
800	5.9
1000	4.7
1200	3.2
1500-3000	-

The solution should be added to the system either through the expansion tank or via a dosing line. You can inquire with a Uniservice Unisafe representative about the possibility of using an automatic dosing system for product administration.

If the system is contaminated with oil and/or scale, it should be cleaned before applying NCLT treatment. For degreasing, use SEA CLEAN, and for descaling operations, use DESCALING LIQUID or POWDER.

## Guidelines for NCLT Treated Cooling Water

Nitrite (NO<sub>2</sub>): Maintain levels between 1500 to 3000 ppm (12 liters of NCLT per ton of water).

Chlorides:

- Normal speed engine: 100 PPM Max
- High-speed engine: 50 PPM Max

Hardness: Maximum 180 PPM CaCO<sub>3</sub>

pH: Maintain a pH range from 8.5 to 9.5. If the pH falls below 8.5, add a small dose of ALKALINITY CONTROL to raise it.

Always add NCLT at points with high circulation. Note that some new system feeder tanks are primarily for expansion and may have limited or no circulation. If treatment levels drop, check for system leakage first. Always use distilled or deionized water.

If there is a loss of treatment levels (Nitrite levels) that is not due to system leaks, consider factors like bacterial contamination or oxidation of nitrite, which can convert it to nitrate and reduce system protection. Contact a Uniservice Unisafe Service Engineer in such cases. For new installations or overhauled systems, closely follow the advice of the Engine Manufacturer in conjunction with Uniservice Unisafe.

NCLT is compatible with all competitors' Nitrite/Borate-based water treatments. Transition to NCLT by allowing the old product to reach its lowest limit and then start dosing Uniservice Unisafe product. During the initial operation, NCLT will gradually remove sludge and other residues, which may result in cloudy water. This cloudiness will clear after draining small quantities of water. You do not need to remove all existing coolant unless excessive contamination is observed. If changing the treatment from a soluble oil inhibitor type, consider draining, cleaning, and possibly degreasing the circuit, but consult a Uniservice Unisafe representative for the correct procedure for transitioning to NCLT.

## Health Safety and Environment (HSE)

Uniservice Unisafe Srl have carefully developed their products to minimize the safety risks and environmental impact of using their products. However, Uniservice advises that, prior to using its products, users should read in detail the accompanying Safety Data Sheet and ensure that its products are applied within the required HSE regulations of the country in which the user operates. Best practice and safety requirements should be followed which will likely include method statements and risk assessments, together with any specific requirements of the user's own company HSE requirements.

## Important Notice

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, this information is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you do a test to determine the suitability of a product for your particular purpose prior to use.

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## Contact


For further information, please contact your local Uniservice Unisafe sales representative or get in touch with us:


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