

# **DIESEL WT**

Diesel engine cooling water corrosion and scale inhibitor in liquid form, suitable for "closed circuit" systems

- \* One of the five StarMarine Water Treatment Products.
- \* Suitable for slow, medium and high speed engines.
- \* Effective inhibition of ferrous and non ferrous metals.
- \* Prevents scale and sludge build ups.
- \* Safe to use when cooling water is heat source for potable water systems.
- \* Does not encourage bacteria in system.
- \* If the chloride level is below 100 PPM CI, also aluminium in normal rated engines is protected.

# **Application**

Diesel WT is a nitrite, borate and polymer based corrosion inhibitor with a suitable buffer to ensure stable pH conditions.

Recommendations for cooling water treated with Diesel WT:

 $\begin{array}{lll} \mbox{Nitrite} & 1200\mbox{-}3000 \mbox{ PPM NO}_2 \\ \mbox{Chloride} & \mbox{max. } 100 \mbox{ PPM CI} \\ \mbox{Hardness} & \mbox{max. } 180 \mbox{ PPM CaCO}_3 \end{array}$ 

pH 9,0 - 10,0



### **Directions for use**

Diesel WT is used in a dosage of 1200 - 3000 mg/l nitrite (NO<sub>2</sub>), dependent on the chloride level and engine type, please refer to the engine manufacturers instructions on recommended nitrite ranges:

Chloride concentration	Initial dosage	Nitrite range
0 - 50 PPM CI	6 ltr/m <sup>3</sup> cooling water	-1500 PPM NO <sub>2</sub>
50 - 100 PPM CI	6-8 ltr/m <sup>3</sup> cooling water	1600-2000 PPM NO <sub>2</sub>

Starting with the treatment of a system, the nitrite level must be kept at the higher nitrite level of the corresponding chloride concentration by testing and dosing daily. If the system is passified the testing frequency and dosing can be reduced till once a week at minimum. Always add Diesel WT at a point where circulation is high. Most modern systems header tanks are purely for expansion and have little or no circulation. Also they are often fitted with an internal baffle which can have the effect of trapping treatment and subsequent difficulty in obtaining the correct levels. The majority of loss in treatment levels will be due to leakage and subsequent dilution by make up water (distilled water should always be used). We advise testing of the Diesel WT level with the StarMarine nitrite control test.

## **Dosing system**

A compact electronic dosing pump and tank unit is available from StarMarine for direct injection to the cooling system. For further details refer to StarMarine equipment information.

#### Remarks

On new buildings or overhauled systems, follow engine manufacturer's advice in conjunction with StarMarine. If changing to Diesel WT from nitrite borate based products of another make, start dosing StarMarine product using StarMarine tests. Diesel WT will slowly remove sludge and other residues during first month. This can result in slightly cloudy water which will clarify after draining small quantities of water and as make up is added, leaving system extremely clean. It is not necessary to drain existing coolant completely unless inspection has shown excessive contamination. StarMarine can give expert advice on cleaning systems.

# **Properties**

Diesel WT is a pale yellow liquid, completely soluble in water. It is based on nitrite and borate in combination with specific inhibitors, organic dispersants and a pH buffer. Compatible with antifreeze products based on mono-ethylene glycol.

Specific gravity (20°C) : 1.20 pH (1% - solution) : 9,5 - 10 Flash point : none

For detailed information on safety and health, please refer to Material Safety Data Sheet and / or Product label.

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