

## **VALVE TREAT**

VALVE TREAT is a liquid compound that contains chemicals proven effective in reducing harmful effects of vanadium oxides and sodium salts in diesel engines.

# **FEATURES & BENEFITS**

- Reduces high temperature corrosion
- Reduces fouling in post-combustion zone such as turbochargers, exhaust valves, economizers
- Separates emulsified water in fuel and enhances water separation at the separator
- Reduces unburned particles and soot emission
- Raises the melting point of sodium vanadium fuel ash
- Keeps exhaust valves and turbochargers clean
- Extends life of valves, cylinders, etc.
- · Reduces corrosion effects caused by vanadium and sodium impurities
- Acid reduction in the exhaust system
- Protects the engine and reduces unscheduled maintenance and expensive breakdowns

#### **PRODUCT DESCRIPTION**

Adding VALVE TREAT to bunker fuel forms a complex compound, that deactivates the vanadium and sodium common in heavy bunker fuels. The melting point of vanadium pentoxide is 675°C and that of sodium sulphate is 880°C. When VALVE TREAT is employed, the complexes formed with vanadium and sodium sulphate by the agents in VALVE TREAT melt at about 1100°C.

#### **APPLICATIONS**

VALVE TREAT is used both in steam and motor vessels burning heavy fuel oils to improve combustion efficiency, reduce corrosion, disperse sludge and separate water. It is primarily formulated for use in diesel engines to prevent valves failure.

#### DIRECTIONS FOR USE

VALVE TREAT is introduced manually into the fuel tanks prior or during bunkering. The fuel movement on entering the tank will blend the product completely with the fuel. The product can also be dosed automatically into the fuel oil service line, prior to the service pump by means of a metering pump. The VECOM MARINE FOT dosing system isrecommended.



For product characteristics and for the nature of special risks and safety advice consult our MSDS. www.vecom-marine.com - sales@vecom-marine.com



## PRODUCT DOSAGE

Dosage requirements depend on the nature and amount of impurities, but typical dosage rate is 1 I of VALVE TREAT per 4 tons of fuel oil, considering a normal vanadium level of 100 PPM. To establish a more accurate and cost efficient dosage rate, it could be useful to test or know the vanadium content at each bunkering.

	Vanadium ppm	50	<u>100</u>	150	200	300	400	50
	Tons of fuel							
Sodium ppm	5	4	5	3.5	2.5	1.25	1	0.75
	35	2.5	4.75	3.25	2.5	1.25	1	0.75
	<u>50</u>	2.5	<u>4</u>	2.75	2.5	1.25	1	0.75
	65	2	2.5	2.5	2.25	1.25	1	0.75
	75	2	2.25	1.75	2.25	1.25	1	0.75
	85	1.5	2.0	1.25	2.25	1.25	1	0.75
	100	1.5	2.0	1.25	2.25	1.25	1	0.75

Example of a dosage rate (underlined in the table above): If a fuel contains 100 ppm vanadium and 50 ppm sodium, the dosage rate will be: 1 I of VALVE TREAT per 4 tons of fuel (1:4000).

### STANDARD PACKING

VALVE TREAT is usually available in steel drums of 25 I.

For product characteristics and for the nature of special risks and safety advice consult our MSDS. www.vecom-marine.com - sales@vecom-marine.com