

DESCRIPTION

In normal engine operating temperatures, vanadium components melt and cover the inner surfaces of exhaust valves and turbochargers. This layer of vanadium shortens the service life of exhaust valves and turbocharger blades. Valve seatings frail, valve cone and seat life's are shorten. ERYAK 220, which is an efficient fuel oil additive in diesel motors and boilers, reactivates with vanadium components and raises their melting point. The reactivated vanadium components remain solid. ERYAK 220 also increase the combustion temperature, solid remains of vanadium components burns in high temperatures and their ashes are easily ejected by gas stream, so no sulfur or sodium formations, remains at exhaust valves and turbochargers. This extends the time between overhauls for exhaust valves and turbocharger blades. The useful life of valve seatings, valve cones and seats are maximizes as well

| Product Name | ERYAK 220 (VANADIUM CONDITION) |
|---------------|----------------------------------|
| Document No | :SP-KS-021 |
| Chemical Name | :Chemical Mixture. |
| Usage Area | :Fuel oils |

A. ORGANIC PROPERTIES

| Appearance | | |
|--------------------------------|---------------|--|
| Physical Status (20°C): Liquid | | |
| Color | : Transparent | |
| Odor | : Solvent | |

B. PHYSICAL PROPERTIES

| pН | (in conc) | : - |
|----------|----------------|--|
| Molecu | lar Weight | : - |
| Flash P | oint | : Over 61°C |
| Density | | $: 0.92 - 1.02 \text{ gram} / \text{cm}^3$ |
| Solubili | ty in Fuel Oil | : Completely |

APPLICATION, FEATURES & BENEFITS

- ✓ Reactivates with vanadium components and raises their melting point which prevents vanadium components to cover engine inner surfaces.
- ✓ Improves combustion temperature. Ejects burned vanadium components, sulfur and sodium formations.
- ✓ Preserves all engine parts especially exhaust valves, turbocharger blades and engine heads from acid corrosion.



- ✓ Reduces fuel consumption.
- \checkmark Can be used together with other fuel additives.

STORAGE INFORMATION

Store at moderate temperatures. Packing: 25-30 L. sealed cans. Storage Period: 3 years.

DIRECTIONS FOR USE/ APPLICATION RATES AND DOSAGE RATES

Dosage for ERYAK 220 is:1 L for 1 - 7 tons of fuel. Permanent usage is required to provide the required dispersion. Best results are taken by adding ERYAK 220 by a metering pump located to the suction side of fuel line. This way you provide a better mixing. Please check the below table to determine the dosage for ERYAK-220.

| Particules in Fuel | <u>% of the particules in Fuel</u> | Dose Required |
|---------------------------|------------------------------------|-------------------|
| | 1 1 0/10 | |
| Carbon Deposits | below %10 | 1 L / 6 tons fuel |
| | %10-%15 | 1 L / 4 tons fuel |
| | %15-%18 | 1 L / 3 tons fuel |
| | over %18 | 1 L / 2 tons fuel |
| | | |
| Vanadium | below 150 ppm | 1 L / 6 tons fuel |
| | 150 - 250 pmm | 1 L / 4 tons fuel |
| | 250 - 350 ppm | 1 L / 2 tons fuel |
| | over 350 ppm | 1 L / 1 ton fuel |
| | | |
| Sulfur | below %1,5 | 1 L / 7 tons fuel |
| | %1,5-%2,5 | 1 L / 4 tons fuel |
| | %2,5-%3,5 | 1 L / 2 tons fuel |
| | over %3,5 | 1 L / 1 ton yakıt |
| | | |
| Sodium | Below 15 ppm | 1 L / 7 tons fuel |
| | 15-30 ppm | 1 L / 5 tons fuel |
| | Over 30 ppm | 1 L / 3 tons fuel |