

Technical brochure and composition

"rb bertomeu" beco Mg Concentrated

Since 1996

Since 2018 Concentrated Additive

Inhibitor of corrosion by Vanadium and Sodium. For all kinds of thermal machines and all fuels with high Vanadium and Sodium contents.

Neutralizes corrosion and prevents slugs and scale in high temperature areas, **in big engines, gas turbines, boilers / steam generators, furnaces and dryers. Optimizes** energy performance.

EFFECTS

Inhibitor of the corrosion caused by **Vanadium and Sodium** in the combustion chamber, the expansion turbines, exhaust valves, turbos and gas circuit. It **prevents** incrustations on the blades of the turbines, on the exhaust valves of the engines, in the turbos and in the heat exchangers of boilers and furnaces. It **optimizes** energy efficiency.

COMPOSITION

> **95% Magnesium Organic salts of Fatty acids (molecules - trade secret) soluble in hydrocarbons.**

Active area / Surface area of 1 gram of Magnesium molecules: $\approx 1,800 \text{ m}^2/\text{g}$

< **5% Organics solvents** with flash point > 65 °C (C.C.)

Transparent liquid substance of yellow-amber tone that does not contain Magnesium solid particles but Magnesium molecules soluble in hydrocarbons.

During the combustion, the **SOLUBLE** Magnesium-molecules of the "**rb bertomeu**" **beco Mg** additive reacts with the Vanadium Oxides forming Magnesium Vanadates with high melting points (higher than 1,200°C), solid and non-corrosive at the internal gas temperature in gas turbines, engines, boilers and furnaces. They are dragged by the flue gas stream without being deposited in the circuit. The V_2O_5 (Vanadium Pentoxide) is neutralized obtaining alkaline-earth vanadates with a high melting point, at the same time of combustion, which eliminates corrosion and scale and eliminates the appearance of low fusion point sodium vanadates.

The binding action of heavy metals (Vanadium) also results in a reduction in the oxidation of SO_2 to SO_3 (formed from the fuel sulfur), by minimizing its catalytic action on the reaction; as a consequence, the formation of sodium sulphate (Na_2SO_4) that melts at 888°C is reduced.

You can read more about this topic at our technical document:

[RB-8 Additives "rb bertomeu" vs corrosion due to Vanadium and Sodium from heavy fuel oil or crude oil](#)

DOSAGE

Doses are variable in function of the Vanadium and Sodium concentration in the fuel and the combustion machinery. We can send you a report without any commitment from your side and completely confidential if you provide us with information about the facility (boiler, engine, gas turbine, etc.), fuel consumption in MT and its chemical analysis.

If you have any technical or commercial question, please fill-in and send this [form](#).

INJECTION POINT: In the fuel's feed pipeline through a metering pump.

PRESENTATION: 1000-liters HD-PE IBC, 220-liters metal drums, 25-liters and 5-liters HD-PE Jerrycans.

TRANSPORT AND ENVIRONMENT:

Catalogued as NON-hazardous for ADR/RID, ADN, IMDG and IATA transportation.

Catalogued as NON-hazardous for the environment.

MANUFACTURER AND COUNTRY OF ORIGIN: Manufactured by "**rb bertomeu**" in Spain (European Union).

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