

Technical brochure and Cost of treatment

"rb bertomeu" beco DC-Ship Concentrated

Since 1996

Since 2018 Concentrated Additive

Complete treatment for Marine fuel oil RMA-10, RMB-30. For marine engines.

Vanadium and Sodium corrosion inhibitor and dispersant additive of MCR carbons and asphaltenes, **demulsifier, detergent, removes** algae and fungi, **keeps** the injectors clean, **optimizes** the combustion, **reduces** the fuel consumption and **saves** maintenance costs.

EFFECTS

Dispersant of carbons and asphaltenes which [reduces sludge](#) by **55%** and the trigger rate at the water treatment plants. **It keeps the filters clean. Demulsifier**, it decants the water and [removes](#) algae and fungi. **Stabilizer** that delays the fuel degradation. **Detergent**, it keeps clean injectors, **improves combustion** and [reduces the emission of unburned particles](#) by **80%**. Soluble Magnesium which [inhibits corrosion](#). **Neutralizes** the incrustations and corrosion caused by Vanadium and Sodium in valves and turbos.

The sum of all effects provides a **3%** [fuel saving](#) and, as a result, the CO₂, NO_x and SO_x emissions are reduced at the same rate of **3%**.

COMPOSITION

- a) > **60%** [Soluble Magnesium carboxylate / Magnesium Organic salts of Fatty acids \(molecules-trade secret\) soluble in hydrocarbons.](#) [see point a-1]
- b) > **25%** **Dispersants**, surfactants, stabilizers, detergents, corrosion inhibitors, demulsifiers, and biocides. [see points b-1 to b-7]
- c) < **15%** Organic **solvents**. [see point c-1]
- d) Density: 0.900 Kg/L

a-1) Soluble Magnesium carboxylate / Magnesium Organic salts of Fatty acids (molecules-trade secret) soluble in hydrocarbons.

b-1) Dispersants, which cause the uniform separation of particles of asphalts, coals and other solids which the fuel oil contains, minimizing sludge formation.

b-2) Surfactants, which reduce the surface tension of the fuel and achieve better pulverization.

b-3) Stabilizers, which detain the ageing and normal degradation of the fuel, and avoid the increase in sediments by increasing the size of the small particles in suspension.

b-4) Detergents, which reduce the formation of coal deposits and flow loss in the injectors, and maintain an excellent pulverization.

b-5) Corrosion inhibitors, which protect the metal parts of the fuel circuits.

b-6) Demulsifiers, which accelerate the speed of separation of the water, to the bottom of the storage tank, for ease of removal.

b-7) Biocides, which help maintaining the integrity of fuels, preventing the bacterial and fungal contamination in the storage tanks.

c-1) Organic solvents with flash point > 65 °C (C.C).

DOSAGE / ADDITION POINT:

At the inlet pipe of the fuel's storage tank

Marine Fuel Oil RMA-30: 0.150 Kg/MT of fuel. - Additive:fuel ratio: 1:6666

Marine Fuel Oil RMA-10: 0.111 Kg/MT of fuel. - Additive:fuel ratio: 1:9000

COST OF TREATMENT ACCORDING TO THE FUEL AND THE SUPPLIED QUANTITY OF ADDITIVE

Cost of treatment for fuel oil RMB-30 (Suggested dose 0.15 Kg/MT of fuel)				
beco DC-Ship Concentrated additive. 1 Kg	23.94 €/Kg	19.68 €/Kg	10.33 €/Kg	9.81 €/Kg
Package	5 L	25 L	4 drums x 200 L	IBC x 1000 L
Cost of treatment for 1 MT of fuel	3.5910 €/MT	2.9520 €/MT	1.5495 €/MT	1.4715 €/MT

Cost of treatment for fuel oil RMA-10 (Suggested dose 0.111 Kg/MT of fuel)				
beco DC-Ship Concentrated additive. 1 Kg	23.94 €/Kg	19.68 €/Kg	10.33 €/Kg	9.81 €/Kg
Package	5 L	25 L	4 drums x 200 L	IBC x 1000 L
Cost of treatment for 1 MT of fuel	2.6573 €/MT	2.1845 €/MT	1.1466 €/MT	1.0889 €/MT

Prices and conditions:

- Tax base
- Freight paid to destination in mainland Spain and the Balearic Islands
- Export: Incoterms 2020 FCA Air and Sea FOB, from Barcelona
- Export: **Express shipment by air 1-2 weeks to any worldwide destination**
- Prices valid until December 30, 2020
- NC-TARIC code: 3811 90 00

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

PRESENTATION

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

ENVIRONMENT AND TRANSPORTATION

Liquid product hazardous for the environment. Cataloged for transportation ADR/RID, ADN, IMDG and IATA:
Class 9, P.G. III, UN 3082

MANUFACTURER AND COUNTRY OF ORIGIN

Manufactured by "rb bertomeu" in Spain (European Union).

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