

PRODUCT DATA SHEET

Df-425

DEFOAMER FOR THE PRODUCTION OF PHOSPHORIC ACID and PHOSPHATE FERTILIZERS (MAP, DAP and SPP)



DEFOAMER WIDE pH RANGE

CHEMICAL- PHYSICAL CHARACTERISTICS

Physical State (at 30°C)	Liquid
Color	Dark amber to brown
Density g/cm ³ (at 30°C)	0.88 ± 0.05
pH (sol. 5%)	4.5 ± 0.5
Solubility in water at 5%	Soluble

PROPERTIES- APPLICATIONS

The Df-425 is a product specifically formulated based in a mixture of anionic tensioactive agents, and additives to inhibit foam formation when manufacturing phosphoric acid by wet process.

Using this product prevents P₂O₅ losses, caused by cells spills, badly washes of gypsum, or drags in evaporators; because it improves the gypsum crystals, and helps to have a better filtration therefore fewer problems of incrustations on the evaporators.

An additional quality of Df-425 has is that it maintains equilibrium of organic matter between the acid from the first wash and the gypsum, in order for the gypsum to not provoke foam when it is discarded at sea. Df-425 also contains an additive that breaks surface tension, resulting in the immediate water clarification.

DOSAGE AND CONTROL

The dosage and application of Df-425 depends on the type of rock that is used. In order to control foam in Morocco's rocks, it is sufficient from 0.5 to 1.0 lts/ Ton P₂O₅. However if required a residual effect, to avoid loss of P₂O₅ in evaporators and to achieve acting as a modifier of gypsum crystals, we recommend using 1.0 to 1.5 lts/ Ton; being fully profitable in its use, since it

decreases P₂O₅ losses. In other types of rocks, as Florida, the dosage is based on the contents of carbonates, organic matter, and dosage could be doubled.

Although there is no simple method of the product's analysis, its efficiency can be checked by the absence of foam spills of the attacked cells. It also decreases P₂O₅ in the gypsum effluents of the filter, and in the discharge of the vacuum ejectors of the evaporators, as well as the total elimination of the black foam from the gypsum when is released to the sea.

HANDLING AND SAFETY

Containers and equipment of carbon steel can be used to handle Df-425.

Df-425 may cause irritation in case of a prolonged contact with skin or eyes. Use goggles and rubber gloves for handling. Df-425 may cause mild irritation in the intestinal tract if swallowed.

PRESENTATION

Df-425 is available from 5, 55 gallon drums to 265 gallon IBC totes.

**Special prices in bulk quantities.*

Note. The information in this data sheet is provided in good faith, based on experience using the product. No representation or warranty, expressed or implied, is made as

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For additional information see the product MSDS.