Technical Information

Current revision 2
29/11/2018

derypol

C/ Plató 6, Entlo. 5º- 08021 Barcelona (Spain)
Tel. (93) 238 90 90 Fax (93) 238 90 91
www.derypol.com

Hyfloc DTC681

Product for water treatments

DESCRIPTION

Metal removal agent.

CHARACTERISTICS

Appearance	:	Green - yellowish liquid
Density	:	1.16 - 1.2
Viscosity	:	< 100 cP
Shelf life	:	We recommend not keeping the product for more than 12 months

Note: The parameters indicated here are not necessarily the specifications of the product. These will be agreed with each customer and will be a part of the contract that must be respected for each batch supplied.

APPLICATION

- The product can be dosified directly or diluted with water in any proportion.
- In treating mixed metals, HYFLOC DTC681 preferentially reacts with metal ions, removing each sequentially with increasing dosage. The order of removal from first to last is as follows: Hg>Ag>Cu>Cd>Pb>Ni>Zn>Fe. The critical metal for removal is defined as the last metal in this removal sequence that is present in the waste and is of concern to the customer. In calculating dosage for mixed metals wastewater, theoretical dosage must account for removal of all metals listed before and including the critical metal.
- Dosage of HYFLOC DTC681 will vary depending upon the concentration and identity of metal ion(s) in the wastewater. HYFLOC DTC681 should be fed neat. A positive displacement pump is suitable for feeding the product to a point in the system where rapid mixing and distribution will occur.
- HYFLOC DTC681 can be used effectively to remove divalent metal ions such as copper, nickel, zinc and Iron II etc. It is less effective in the precipitation of trivalent metal ions such as Chromium III or Iron III. Higher valence metals that are present as anions, such as molybdate or dichromate, will not be precipitated by HYFLOC DTC681.

- Table 1: HYFLOC DTC681 dosage needed for metal removal (1 ppm)

Element	Symbol	HYFLOC DTC681
Mercury	Hg	4 ppm
Silver	Ag	3 ppm
Cadmium	Cd	6 ppm
Copper	Cu	11 ppm
Lead	Pb	4 ppm
Nickel	Ni	12 ppm
Zinc	Zn	11 ppm
Cobalt II	Co II	12 ppm
Iron III	Fe III	19 ppm
Manganese	Mn II	13 ppm
Antimony	Sb	9 ppm
Arson	As	14 ppm
Chrome	Cr	21 ppm
Thallium	Tl	2 ppm

Example:
A wastewater contains 10 ppm Cu, 5 ppm Ni and 4 ppm Zn. The plant discharge permit specifies 0.5 ppm Cu, 0.5 Ni and 1 ppm Zn. The critical metal here is Zn. The calculated theoretical dosage is : (10x11)+(5x12)+(4x11) = 214 ppm

Consult our technical staff in case of doubt.

BENEFITS

- Product is designed to remove a wide range of heavy metal ions from wastewater streams.
- The product reacts with soluble metals to form an insoluble complex and is effective even in the resence of chelating agents. When added to waste water, it will produce a light colloidal precipitate. Depending on the wastewater, the resulting precipitate requires an effective coagulant for charge neutralization and/or the addition of a flocculent for the ultimate removal of the metal.
- Effective in a wide range of pH.
- It can work alone or in combination with other products commonly used in water treatment, such as: aluminum sulphate, aluminum polychloride, ferric chloride, polyamine, lime, etc.
- It is easily dissolved without the need of agitation

STORAGE AND DISTRIBUTION

- The product should be kept in a covered place, the container tightly closed, protected from sunlight and within the temperature range recommended in Section 7 of the Safety Data Sheet.
- Once the container is open, avoid contamination with any other water based product and/or with strong bases. Check the Material Safety Data Sheet.
- There is a great variety of containers. Check with our Customer Service in order to choose the most convenient one.

- Store separately from acid or alkaline products, and from strong oxidizing agents.

Compatibility table:

Compatible	Not Compatible
Polyvinyl Chloride	Brass
Polypropylene	Aluminum
Polyethylene	Copper
Hypalon®	Mild Steel
Stainless Steel 304	
Stainless Steel 316	
Neoprene	
Teflon	
Fiberglass	

REGULATORY

Consult our technical staff in case of doubt.