

# Danafloat™ 123 mineral collector

## **Application**

Danafloat 123 is an aqueous solution of dialkyl dithiophosphate.

Danafloat 123 is the most selective collector in the Danafloat dithiophosphate range. It has no frothing characteristics. Being a selective reagent Danafloat 123 is useful as a rougher collector producing a high grade first concentrate. For optimum recovery a scavenger collector, e.g. a stronger dithiophosphate or a xanthate in conjunction with Danafloat 123 is used.

Danafloat 123 is very selective towards pyrite and other iron sulphides and is therefore used in the flotation of copper sulphide mineral and Cu-activated sphalerite, particularly in the presence of pyrite. It does not float lead sulphide. The collector

being a selective reagent is applicable on easy floating liberated copper sulphide like Skim-Air floation in the grinding circuit.

Danafloat 123 can be added undiluted or preferably diluted with clear water to 5-20% solutions to better control the dosage. It is good practice to stir before use.

The dosage of *Danafloat 123* varies with the type of ore, usually falling within the range of 20 to 100 grams per metric ton ore.

Danafloat 123 is effective in the pH range of 4 to 12. Because of its selectivity against iron sulphides, Danafloat 123 can be used at lower alkalinity than xanthates.

### Composition

Chemical name: ethyl-dtp-Na

CAS name: Phosphorodithioic acid, 0,0-diethyl ester, sodium salt

Active ingredient: 49-51% by weight

## **Physical properties**

Appearance: Light brown

Form: Liquid (aqueous solution)

Boiling point: 104 degrees C
Melting/freezing point: 2 degrees C
Specific gravity: 1.187 g/ml
Flash point: None







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## Safety and handling

Danafloat flotation collectors are manufactured under carefully controlled conditions. However, to varying degrees they can be considered harmful and therefore before handling this product always carefully read and understand the MSDS for this product.

Danafloat 123 causes irritation to eyes and skin.

Safe handling includes the use of safety glasses, natural rubber gloves and protective clothing.

### **Storage**

- + Store in a dry and well-ventilated place away from heat and sunlight after the principle "first in/first out"
- + Avoid freezing
- + Store in plastic drums or coated steel drums

## **Environmental impact**

Danafloat 123 is biodegradable. The majority of the collector is tied up with the concentrate and is destroyed in the subsequent

processing operations. The remainder is transferred to the tailings. Release into the water systems should be avoided.

### **Packing**

Danafloat mineral collectors are supplied in tank containers or plastic drums. If preferred, Danafloat collectors may be supplied in coated steel drums.

Tank containers Net weight: approx. 20 mt

Drums Net weight: 225 kg

Gross weight: approx. 235.5 kg for plastic drums

approx. 247 kg for coated steel drums

Notice to customer: The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Cheminova A/S 2011

