

# Danafloat™ 345 mineral collector

## **Application**

Danafloat 345 is an aqueous solution of dialkyl dithiophosphate.

Danafloat 345 has little or no frothing properties. It is a selective collector towards iron sulphides in an alkaline circuit, usually at slightly lower pH than for xanthates. The main application of this reagent is in the flotation of copper sulphides in the presence of pyrite. It is also an effective collector for gold, silver and sphalerite. In many cases a scavenger collector, e.g. small amounts of xanthate, is used. Other applications of Danafloat 345 are the flotation of metallic copper in a low lime circuit and copper oxides and copper sulphides in a mixed oxidesulphide ore.

Danafloat 345 requires only short conditioning time and is therefore useful for staged addition. Experience has shown that a mixture of alkyldithiophoshate and a xanthate or a mixture of two dithiophosphates is often better than either of the collectors alone.

*Danafloat 345* can be added undiluted or preferably diluted with clear water to 5-20% solutions. It is good practice to stir before use.

The dosage of *Danafloat 345* is usually considerably less than for other sulphide collectors. It varies with the type of ore, usually falling in the range of 10 to 50 grams per metric ton ore.

Experience has shown that *Danafloat 345* is effective in the pH range of 4 to 12. Because of its selectivity towards pyrite, *Danafloat 345* can be used at slightly lower pH than xanthates.

#### Composition

Chemical name: s-butyl-dtp-Na

CAS name: Phosphorodithioic acid, 0,0-bis(1-methyl-propyl)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: Minus 1 to minus 3 degrees C

Specific gravity: 1.13 g/ml Flash point: None







#### **CHEMINOVA A/S**

P.O. Box 9 DK-7620 Lemvig Denmark Phone +45 96 90 96 90

Fax +45 96 90 96 91 danafloat.com

## 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 345 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 345 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

