



Danafloat™ 245 mineral collector

Application

Danafloat 245 is an aqueous solution of dialkyl dithiophosphate.

Danafloat 245 has practically no frothing characteristics. It is fast and compared to other thiol collectors more selective in the flotation of copper sulphides in the presence of zinc and of iron sulphides and copper-activated zinc sulphides from iron sulphides. Other applications are flotation of copper-activated iron sulphides, flotation of nickel-bearing minerals, antimony minerals, chalcocite and for improvement in the recovery of precious metals, e.g. gold, silver, platinum.

Danafloat 245 floats oxide copper minerals as well as sulphide copper in a sulphide-oxide ore very well. This collector has found application in the bulk flotation of copper and cobalt minerals in conjunction with other thiol collectors, usually at neutral pH.

Danafloat 245 requires only very short conditioning time and is therefore useful for staged addition. It can be used alone or in

some cases in combination with an auxiliary collector, such as xanthates.

Experience has shown that a mixture of alkyl dithiophosphate and a xanthate is often better than either of these two types of collectors alone.

Danafloat 245 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 245* is usually considerably less than for other sulphide collectors and varies with the type of ore, usually falling within the range of 10 to 50 grams per metric ton ore.

Experience has shown that *Danafloat 245* is effective in the pH range of 4-12. Because of its selectivity towards iron sulphides, *Danafloat 245* can be used at slightly lower pH than xanthates.

Composition

Chemical name:	i-butyl-dtp-Na
CAS name:	Phosphorodithioic acid, O,O-diisobutyl ester, sodium salt
Active ingredient:	49-51 % by weight

Physical properties

Appearance:	Light brown
Form:	Liquid (aqueous solution)
Boiling point:	107 degrees C
Melting/freezing point:	Minus 11 degrees C
Specific gravity:	1.13 g/ml
Flash point:	None



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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 245 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 245 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

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