



Danafloat™ 871 mineral collector

Application

Danafloat 871 is an aqueous solution of dialkyl dithiophosphate and mercaptobenzothiazole.

Danafloat 871 has little or no frothing properties. It requires a longer conditioning time than do the xanthates and for this reason is usually added to a conditioning step or in some instances to the grinding mill.

Danafloat 871 is used in the flotation of oxidized lead and copper ores after sulfidization in a soda ash circuit, alone or in conjunction with xanthate or other dithiophosphate type collectors in the flotation of copper and lead in complex sulphide ores and gold-silver ores. In cases where copper and lead are somewhat slower floating, *Danafloat 871* may produce a faster flotation kinetic than other collectors. It has also found

use in the flotation of pyrite in acid circuits in the pH range of 4 to 6. In the latter case the dosage of *Danafloat 871* is considerably lower than for xanthates. *Danafloat 871* is rated an excellent collector in the flotation of auriferous pyrite.

Danafloat 871 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 871* varies with the type of ore, usually falling in the range of 10 to 100 grams per metric ton.

Experience has shown that *Danafloat 871* is effective in the pH range of 3-12.

Composition

Chemical name:	i-propyl-dtp-Na, s-butyl-dtp-Na and MBTNa
CAS name:	Phosphorodithioic acid, O,O-bis(1-methylethyl) ester, sodium salt, phosphorodithioic acid, O,O-bis(1-methylpropyl) ester, sodium salt and 2(3H)-Benzothiazolethione, sodium salt
Active ingredient:	24-26%, 6-7% and 11-12% by weight respectively

Physical properties

Appearance:	Yellow to brown
Form:	Liquid (aqueous solution)
Boiling point:	104-105 degrees C
Melting/freezing point:	Minus 9 to minus 11 degrees C
Specific gravity:	1.16 g/ml
Flash point:	>100 degrees C



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 871 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 871 is biodegradable. LC₅₀, 96 hrs Rainbow trout 1.8 mg/l for MBTNa. LC₅₀, 48 hrs Daphnia magna 19 mg/l for MBTNa. The majority of the collector is tied up with the

concentrate and is destroyed in 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
IBC containers	Net weight:	1,000-1,075 kg
	Gross weight:	approx. 1,059-1,134 kg

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