POTASSIUM AMYL XANTHATE KAX 51



PROPERTIES

Chemical Formula

 $C_5H_{11}OCS_2K$

Molecular Weight Density 202.3792g/mol 1.073g/cm³

Composition >

>80% Xanthate

<10% Acetone Insolubles

Appearance

Yellow - Orange

Solid Pellet

DOSAGE

Solution Strength Dosage Range 5 - 30% w/w 10-100g/t

XANTHATES

Xanthates are water soluble organo sulphur alkyl salts primarily used in the flotation of non-ferrous metallic sulphide minerals. Xanthates can also be used in auriferous flotation, flotation of oxide minerals when treated with a sulphidizing reagent and oxidized/tarnished minerals when treated with a sulphidizing or surface cleaning reagent.

MINERAL PROCESSING APPLICATIONS

KAX 51 is Prospec's Potassium Amyl Xanthate (C5 alcohol). KAX51 is the strongest, least selective of the standard xanthates with applications in the flotation of;

- Copper, Copper-Gold, Copper-Molybdenum, Copper-Nickel
- Auriferous (Gold, Gold and/or Silver with pyrite and/or arsenopyrite)
- Activated Zinc
- Pyrite
- PGMs

In typical applications, KAX51 is dissolved in water prior to its introduction to a flotation circuit. Finer dosage adjustments can be attained by further diluting the xanthate solution with water. KAX51 easily disperses in most flotation pulps, leading to short conditioning times. Stage addition of KAX51 can improve flotation characteristics where applicable, with typical addition points at the head of a circuit and further downstream at the scavenger section of a circuit.

STORAGE

All Xanthates should be stored in a cool, dry and well vented space. They should be kept out of direct sunlight.

HANDLING

Safe handling of Xanthates requires the use of proper personal protective equipment such as rubber boots, high fit rubber gloves, coveralls, a properly fitted respirator with the appropriate cartridges, safety glasses, splash apron and face shield.

HANDLING SYSTEMS

Handling systems should be manufactured to ensure that none of the components can be compromised by the chemical nature of the xanthate and its components. It is recommended that only mild steel and/or stainless steel be used for all components of the handling system. It is also recommended that the solutioning system and any storage tanks be full discharge conical bottom, as this prevents the buildup of precipitates and decomposition products, also making it easier to service and clean.

PACKAGING OPTIONS

With a few exceptions, xanthates are sold, packaged and delivered as a dry product requiring solutioning for application in flotation processes. UN approved packaging options from Prospec Chemicals include;

- 150kg NET Steel Open top drums
- 500kg, 750kg, 850kg NET FIBC

- 800kg NET IMDG approved composite package (for ocean shipment)
- Special packaging on request.

CONTACT

For additional information and support, please contact your technical account manager or Prospec Chemicals.

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