POTASSIUM ISOBUTYL XANTHATE KAX 41



Chemical Formula $C_4H_90CS_2K$ H-C-H $C_4H_90CS_2K$

Molecular Weight

188.35g/mol

Composition

>80% Xanthate

<10% Acetone Insolubles

Appearance

Yellow - Orange Solid Pellet

DOSAGE

Solution Strength 5 - 30% w/w Dosage Range 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

KAX41 is Prospec's Potassium Isobutyl Xanthate (C4 alcohol). KAX 41 is recommended for most sulfide ores where selectivity and collecting strength are required. KAX 41 will perform well with tarnished or oxidized sulfides that have been sulphidized.

- Low Grade Copper, Copper-Zinc, Copper-Lead-Zinc.
- Low Grade Refractory Gold (Gold and/or Silver with pyrite and/or arsenopyrite)
- Activated Zinc

Potassium isobutyl xanthate is a strong bulk collector that is relatively selective. KAX 41 will recover all sulfides but can be fairly selective if the proper chemical conditions are present. KAX 41 is typically used for higher grade ores and in mills that require a strong pulling power with some selectivity. KAX 41 is commonly used in zinc circuits where NAX 31 does not have the required strength and some selectivity can be sacrificed.

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.

The information contained herein is based on the works of others and those of Prospec Chemicals, Charles Tennant and Company (Canada) Ltd., division of Tennant Chemicals Company Limited's (TCLI) own laboratory work, and is believed to be reliable. TCLI makes no warranties, expressed or implied, as to the accuracy, completeness, or adequacy of the information contained herein. TCLI shall not be liable (regardless of fault) to the vendee's employees, or anyone for any direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of such information. Nothing contained herein grants or extends a license, express or implied, in connection with patents, issued or pending, of TCLI or others.