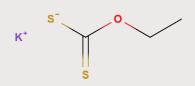
# POTASSIUM ETHYL XANTHATE KAX 20



# **PROPERTIES**

Chemical Formula

 $C_2H_5OCS_2K$ 



Molecular Weight Density 160.30g/mol 1.263g/cm<sup>3</sup>

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 20 is Prospec's Potassium Ethyl Xanthate (C2 alcohol). Potassium ethyl xanthate is the weakest xanthate, but is very selective given the correct chemical conditions. KAX 20 is best for the recovery of sulphides that are relatively hydrophobic like galena. KAX 20 can recover all sulphides but because of it's weak nature, the flotation kinetics are very slow.

- Lead-Zinc ores
- Copper Ores
- Copper Ores with minimal amounts of Zinc

KAX 20 is not recommended for copper sulfide or copper activated sphalerite flotation unless the head grades are low. This is due to the large retention time required to compensate for the slow kinetics. KAX 20 is also not recommend for partially oxidized ores because it will not have the pulling strength to recover target minerals.

#### **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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