

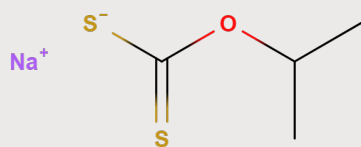
# SODIUM ISOPROPYL XANTHATE

## NAX 31



### PROPERTIES

Chemical Formula  $C_3H_7OCS_2Na$



Molecular Weight 158.2g/mol

Composition >80% Xanthate  
<10% Acetone Insolubles

Appearance Yellow - Light Green  
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

NAX 31 is Prospec's Sodium Isopropyl Xanthate [C3 alcohol]. NAX31 is a stronger collector than KAX20 and is fairly selective compared to the stronger Potassium Amyl based KAX51. NAX31 has mineral processing applications in the selective flotation of

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

NAX 31 can float all sulfides but is not recommend for scavenging or high grade sulfides. NAX 31 is most commonly used in zinc flotation circuits because it is selective against iron sulfides at high pH (> 10) while aggressively collecting the copper-activated zinc. NAX 31 has also been used for copper

and lead flotation. NAX 31 can also be used to float pyrite and pyrrhotite if the iron sulfide grade is fairly low and the pH is low. Higher grade ore should not use NAX 31 because of the larger retention time required to get desired recovery levels. In typical applications, NAX 31 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. NAX 31 easily disperses in most flotation pulps, leading to short conditioning times. Stage addition of NAX 31 can improve flotation characteristics where applicable, with typical addition points at the head of a circuit and further downstream.

### PACKAGING OPTIONS

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

- 150kg Net Steel Open top drums
- 500kg, 750kg NET FIBC
- 800kg NET IMDG approved Combination package (primarily for international shipment)
- Specialty packaging on request.

All FIBC's being shipped in ocean going containers must be packaged in an approved box for combination package, also available at Charles Tennant & Company's production facilities. Liquid Xanthates are available for domestic customers in 20,000 kg bulk tank truck deliveries. All packaging is UN approved.

### 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.



**PROSPEC CHEMICALS**  
176 Sturgeon Drive  
Sturgeon County, AB, T8L 5C1  
Phone: (780) 992-1522

**PROSPEC CHEMICALS**

A DIVISION OF CHARLES TENNANT AND COMPANY



**CHARLES TENNANT AND COMPANY**  
34 Clayson Road,  
Toronto, ON, M9M 2G8  
www.ctc.ca