Nasaco International Limited

Petite Rue 3, 1304 Cossonay, Switzerland

PRODUCT DATA SHEET

NASCOL 201 (Isopropylethyl thionocarbamate)

NASCOL 201 is one of the most selective sulphide mineral flotation reagent available in the marketplace today. It shows very little affinity for pyrites, pyrrhotites or unactivated sphalerites. It is a potent promoter for copper, nickel and lead sulphides and copper activated sphalerite. NASCOL 201S is the emulsifiable form of NASCOL 201 It is not as surface active as the soluble xanthates and dithiophosphates and is therefore more effective where clays, talc and other sliming minerals present an interference problem. Because NASCOL 201 is so selective against iron minerals, many operations can run at lower pH than many standard thiol collectors.

Activity

NASCOL 201 is not soluble. It has a long 'shelf life' and when stored under recommended storage conditions can be kept for two years. Manufacture is from high quality raw materials, components which could destroy the selectivity of the product have been excluded, this results in reduced dosage.

Application

NASCOL 201 is stable over a wide range of pH (2 - 13). It can be used to float cement or precipitated copper in acid circuit.

Applications using NASCOL 201 and associated specialty collectors range from precious metals (gold, pgm and silver), base metal sulphides and native copper.

NASCOL 201 is usually added to the grinding mill but can be used to generate additional froth by adding to the head of the flotation circuit.

Improved final concentrate grades can often be obtained by addition of a small amount of NASCOL 201 to the regrind circuit.

In the case of spills or leaks, the material should be soaked up in adsorbent material and disposed of in accordance with local laws. Do Not allow to contaminate groundwater.

Dosage

Dosage rates for NASCOL specialty collectors vary depending on ore type, typical additions range from 5 to 20 g/t, in many cases reagent addition will be reduced.

Handling & Storage

NASCOL 201 is flammable, having a flash point of 38ºC, however normal safe handling of NASCOL 201 should present little risk. The following storage and handling recommendations should be followed.

Workers handling chemicals should wear gloves, goggles and clean body covering clothing. Drums should be emptied carefully to avoid spillage. Good ventilation should be provided.

NASCOL 201 should be stored under cover with good ventilation.

Do not allow containers to corrode, as this leads to leaks of the product. Use containers on a first in first out basis.

Unused drums should be kept sealed. Containers should be opened carefully under well ventilated conditions. No naked lights.

NASCOL 201 will seriously corrode brass, copper and aluminium alloys. High density polyethylene or 304 Stainless steel are compatible materials

Protective Clothing

Personnel handling chemicals should wear clean body covering clothing, gloves and chemical workers goggles.

Contamination incidental to normal handling is unlikely to occur, if however skin or eye contact does occur, the following first aid guidelines should be followed.

First Aid

Skin - NASCOL 201 will give an alkaline type skin burn. If skin contact occurs, wash the effected area with plenty of water and a neutral soap for a minimum of five minutes.

Eye - If eye contact occurs, wash with plenty of clean water for a minimum of fifteen minutes, holding the eye open. Medical advice should be sought.

Ingestion - In the case of ingestion, induce vomiting and immediately seek medical attention.

Toxicity

The LC_{50} for fingerling trout is 32mg/l.

Prolonged contact with the product or its solutions may cause alkaline skin burns.

Fire

In the case of fire, types A and B extinguishers should be used.

Packaging

NASCOL 201 is supplied in 200kg polyethylene drums, in IBC containers (totes) of 1000kg or in bulk containers of 20,000 liters.

NASCOL 201 has a shelf life of 36 months from date of manufacture.

Further information and samples are available from:

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