

Sodium Di(isobutyl)dithiophosphinate

Dithiophosphinate liquid collector for selective copper, lead and zinc sulfide flotation.

CAS No. 13360-78-6	EC / List No. 236-419-2	Transport Non-dangerous goods
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Product Information

Sodium Di(isobutyl)dithiophosphinate is an organosulfur collector supplied as yellowish liquid at 49–53% active content. Its active component has CAS 13360-78-6, formula C₈H₁₈NaPS₂ and molecular weight 232.32 g/mol. It is a distinct substance from sodium diisobutyl dithiophosphate (CAS 53378-51-1); their specifications and safety data must be kept separate.

Specifications

Parameter	Specification
Appearance	Yellowish liquid
Active / mineral substance content	49–53 % wt
pH	7.0–10.0
Relative density at 25°C	1.08–1.18
Water solubility	Soluble

Active content and appearance follow the matching local 2026 phosphinate TDS. pH and relative density come from the legacy CAS 13360-78-6 page. The local folder name is misleading; the document contents identify dithiophosphinate, not dithiophosphate.

Typical Properties

Property	Typical Value
Molecular formula	C ₈ H ₁₈ NaPS ₂
Molecular weight	232.32 g/mol

Applications

Copper and zinc sulfide flotation: Selective collector for suitable copper and zinc sulfide feeds. Test mineral activation, pH, collector blend and iron-sulfide depression to obtain the required balance of recovery and concentrate quality.

Lead and complex polymetallic circuits: Collector option for complex lead-zinc and other polymetallic sulfide feeds. Confirm mineral association and competing sulfide recovery at each flotation stage before defining the reagent scheme.

Precious-metal-bearing sulfide recovery: Used where valuable gold or silver is associated with recoverable sulfide mineral phases. Evaluate the specific ore, liberation and collector combination through bench and plant trials; no universal recovery improvement is claimed.

Packaging / Storage

Item	Information
Packing	100 kg plastic drums / 1,000 kg IBC
Storage	Keep tightly closed in a cool, dry, well-ventilated area away from acids, strong oxidizers and heat. Use compatible containers, protect closures from damage and prevent release to acidic drains.
Handling	Use closed transfer or local extraction where practicable. Wear chemical-resistant gloves, protective clothing, splash goggles and face protection. Avoid mist and skin contact; acid contamination can generate toxic hydrogen sulfide, so never rely on odour to detect a release.

Company Contact

Supplier	Hainan Zhongxin Chemical Co., Ltd. (ZXCHEM)
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