

矿山装备篇

Mine equipment

选矿药剂

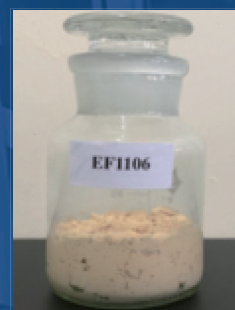
Beneficiation Reagent



EF1106 氟碳铈稀土矿和钨矿捕收剂

化学简式: R-CONHOH(R-代表烷基)

药剂性能:与常规药剂相比,该药剂选择性好、药剂用量少,采用该药剂可获得杂质少、高品位的精矿,同时可解决浮选指标低且不稳定的问题。



EF1106: Collector for bastnasite and scheelite

Chemical formula: R-CONHOH (R standing for alkyl)

Reagent performance: compared with conventional reagents, this reagent is characterized by better selectivity and less consumption. By using this reagent, it is possible to obtain high-grade concentrate with less impurities and helps solve the problem of low flotation index and instability in processing industry.

EF1108有色金属硫化矿的捕收剂

该药剂对硫化铜、铅、钼矿物的捕收能力强、选择性高,产品的化学成分稳定、杂质含量低、使用效果好,有利于提高金属及其伴生金的回收率。该药剂用作硫化铜钴矿捕收剂时,可有效提高铜钴分离效果。通过提高矿物表面的疏水性,使矿物表面疏水而上浮,且对硫化铜矿物的捕收有较好的选择性。

应用业绩:

赞比亚某铜钴矿中含铜1.92%、含钴0.090%,采用铜优先浮选工艺,以EF1108作为硫化铜矿的捕收剂、EF1301作为硫化钴矿的抑制剂,与之前的药剂制度相比,总铜回收率提高了3%。

Collector EF1108 for Nonferrous Metal Sulfides

This reagent has the advantage of high collective power, high selectivity in respect of copper, lead and molybdenum sulfide, stable chemical composition of the products, low impurity content and good performance, being beneficial to improving the recovery of the metals and their associated gold. When used as collector for copper-cobalt sulfide, this reagent is able to effectively enhance the copper-cobalt separation performance. By improving the hydrophobicity of the mineral surface, it makes minerals float as their surface becomes hydrophobic, it also has good selectivity for collecting copper sulfide minerals.

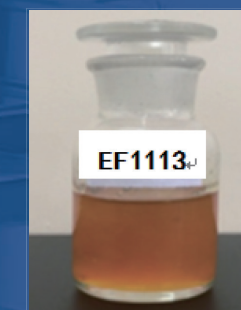
Applications:

There is a Copper Mine in Zambia, its Cu-Co ore contains 1.92% of copper and 0.090% of cobalt, for which the differential copper flotation process is adopted with EF1108 as collector for the copper sulfide ore and EF1301 as inhibitor for the cobalt sulfide ore. Compared with the previous reagent regime, the total copper recovery is improved by 3%.



EF1113硫化锌矿的捕收剂

该药剂可在低碱度条件下高效捕收硫化锌矿,而几乎不捕收黄铁矿、磁黄铁矿和毒砂,解决了因大量使用石灰带来的管道堵塞、选矿水pH值过大等问题,可广泛应用于锌硫磷分离等有色金属矿的浮选作业。



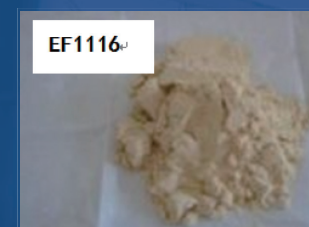
EF1113

This reagent enable efficient selective capture of Sphalerite from pyrite, pyrrhotite and arsenopyrite, thereby solving the problems of pipeline blockage and too high a pH value of flotation water resulting from massive use of lime. It can be widely used in the flotation operation of nonferrous metals such as zinc-sulfur and arsenopyrite separation, etc.

EF1116-EF1121 锂云母、锂辉石捕收剂

化学简式: R-COOH(Na) (R-代表烷基)

药剂性能:在常规油酸结构中嫁接特定功能的官能团,以实现理辉石和理云母的高效选择性捕收,且耐低温、耐盐、易被自消解/降解。



应用业绩:

TY436在非洲某锂矿浮选中的应用

非洲某锂矿主要矿物是锂辉石和锂云母,采用TY436作为捕收剂,解决了矿石中伴生的含钙、镁、铁矿物影响锂辉石浮选的技术难题和选矿废水回用造成浮选技术指标降低的难题,实现理矿物高效分选,该技术获国家发明专利。

EF1116-EF1121 Collectors for lepidolite and spodumene

Chemical formula: R-COOH (Na) (R standing for -representative alkyl)

Reagent performance: Grafting function-specific groups in conventional oleic acid structures to enable efficient selective capture of lepidolite and spodumene, and being of low temperature resistance, salt resistance, susceptible to autolytic digestion/degradation.

Applications:

TY436 in flotation of lithium ore in Africa

The lithium minerals of a lithium mine in Africa are spodumene and lepidolite, where TY436 is used as collector to address the technological challenges of spodumene flotation difficulty posed by Ca, Mg and Fe minerals associating the ore as well as flotation performance degradation as a result of reusing mineral process wastewater, This reagent enables a high-efficiency separation of the lithium minerals, and the technology has received a national invention patent in China



EF1301硫化铅矿和硫化钴矿、毒砂的抑制剂

该药剂可实现硫化铜矿与硫化铅矿、硫化钴矿、毒砂的高效分离，同时可消除优先浮选回水直接回用时对铜钴分离的影响，可提高选别指标。EF1301为X-R-Y结构，其中X为可选择性作用在硫化铅矿物表面的功能团、R为较短的烃链、Y为亲水基团，从而使硫化铅矿物表面亲水。具有使用简单、环境友好、成本低廉的优势。

应用业绩：

青海某矿业的原矿中含铜0.12%，含铅1.37%，选矿厂采用混合浮选工艺获得铜铅混合精矿，现场原有药剂制度较难获得合格的铅精矿和铜精矿，铜铅的有效分离成为企业增加经济效益亟需解决的重要难题。青海某矿业委托中国恩菲矿研技术公司开展了选矿小型试验研究，采用自主研发的铅抑制剂EF1301，实现了铜铅混合精矿的有效分离，分别获得了高质量的铜精矿和铅精矿，解决了铜铅精矿互含高的难题。

Inhibitor EF1301 for Lead sulfide, cobalt sulfide and arsenopyrite

This agent can be used to achieve high-efficiency separation of copper sulfide from lead sulfide, cobalt sulfide and arsenopyrite. Meanwhile, it can eliminate the impact of direct reuse of reclaim water from selective flotation on copper-cobalt separation, thus improving the separation performances. EF1301 is of X-R-Y structure, where X is the functional group that can selectively act on the surface of PbS, R is the shorter hydrocarbon chain, and Y is the hydrophilic group, which make the surface of PbS to be hydrophilic. This reagent has the advantages of easy use, eco-friendly and lower cost.

Applications:

There is a mining industry company in Qinghai., its ROM contains 0.12% of copper and 1.37% of lead. Its concentrator adopts bulk flotation process to produce Cu-Pb bulk concentrate. Using previous reagent regime of the plant cannot produce qualified Pb and Cu concentrates, while efficient Cu-Pb separation is a big challenge for the plant to increase economic benefits and a critical issue that needs to be solved urgently. Therefore, this company commissioned China ENFI to conduct a bench-scale test research, which realized efficient separation of Cu-Pb bulk concentrate by employing ENFI's proprietary Pb inhibitor EF1301, and high quality Cu concentrate and Pb concentrate have been obtained respectively, which solved the challenge of separating Cu and Pb concentrates.



EF1302硅酸盐类脉石抑制剂

在氧化锑矿浮选中加入该药剂可有效抑制石英等脉石，且对氧化锑矿的抑制作用较弱，可实现氧化锑矿与石英等脉石的高效分离。增加石英等硅酸盐类脉石矿物表面的亲水性，减少捕收剂吸附，从而达到抑制脉石矿物的目的。

应用业绩：

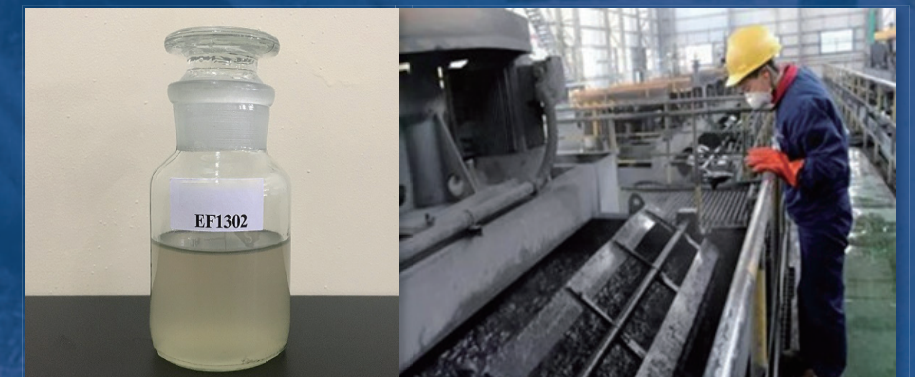
湖南某锡矿山的锑矿是硫化锑矿和氧化锑矿的混合矿，在中国恩菲研发药剂EF1103与丁基黄药配合下，采用优化的混合浮选工艺。以EF1302为石英等脉石矿物的抑制剂，实现氧化锑矿和硫化锑矿同时浮选回收，并可有效提高锑作业回收率。与硫化锑矿浮选+重选的工艺流程相比，在获得合格锑精矿的条件下，提高10%的锑作业回收率。

Inhibitor EF1302 for Silicate Gangues

Adding this reagent in the flotation of antimony oxide can effectively inhibit quartz and other gangues, while its inhibiting action on antimony oxide is weak, which can realize the high-efficiency separation of antimony oxide from quartz or other gangues. The goal of inhibiting gangues is achieved by increasing the surface hydrophilicity of quartz and other silicate gangue minerals and reducing the adsorption of collectors.

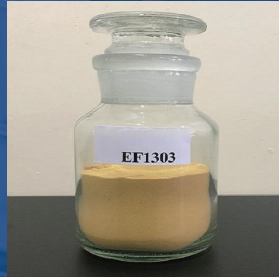
Applications:

There is an antimony mine in Hunan, its antimony ore is a mixture of antimony sulfides and antimony oxide. By using the reagent EF1103, which is researched and developed by ENFI, and butyl xanthate, adopting optimized bulk flotation process with EF1302 as the inhibitor for quartz and other gangue minerals, the antimony oxide and antimony sulfide can be recovered by flotation at the same time and the antimony process recovery is improved effectively; compared with the process flow of antimony sulfide flotation + gravity separation, the antimony process recovery can be increased by 10% under the condition that antimony concentrate is obtained.



EF1303硫化钴矿活化剂

该药剂对硫化钴矿的活化作用明显，可有效提高捕收剂在硫化钴矿表面的吸附，提高钴精矿的品位和回收率。通过增加硫化钴矿物表面对捕收剂的吸附能力，提高硫化钴矿物的浮选效率。



应用业绩：

该药剂在赞比亚某铜钴矿企业进行了应用实践，有效活化被抑制的硫化钴矿，提高钴精矿的品位和回收率，钴精矿的钴品位由原来的3%提高到了5%，回收率由原来的6%提高到了33%。

Activator EF1303 for Cobalt Sulfide

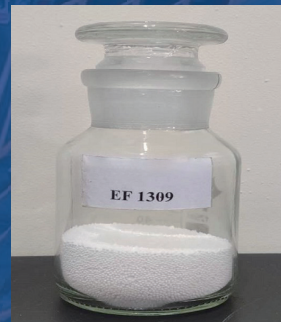
This reagent has an obvious activation on cobalt sulfide, can effectively improve the adsorbability of collectors on the surface of cobalt sulfide to improve the grade and recovery of cobalt concentrate. The flotation efficiency of cobalt sulfide is increased by increasing the adsorption ability of cobalt sulfide surface to collectors.

Applications:

This reagent was applied in a copper-cobalt mining company in Zambia. It can effectively activate the inhibited cobalt sulfide and improve the grade and recovery of cobalt concentrate. The cobalt grade of cobalt concentrate is increased from 3% to 5%, and the recovery is increased from 6% to 33%.

EF1309黄铁矿、白铁矿的浮选抑制剂

该药剂可在低碱度条件下有效抑制黄铁矿，解决了因大量使用石灰带来的管道堵塞、选矿水pH值过大等问题，可广泛应用于铜硫分离、锌硫分离等有色金属矿的浮选作业。增加目的矿物表面的亲水性，减少捕收剂吸附，从而达到抑制矿物的目的。



应用业绩：

南美某含高岭土和次生铜的铜硫矿，采用EF1309与石灰组合作为黄铁矿的抑制剂，可实现铜硫低碱度下分离，并可有效提高铜、金作业回收率，与传统的高碱度工艺流程相比，在获得合格铜精矿的条件下，铜、金作业回收率分别提高了1.5%和5%。该技术获国家发明专利2项。

该药剂在青海某铜铅锌厂锌硫分离作业进行了应用初探，能够有效提高锌硫分离效率；在湖南某多金属矿山钼铋分离作业段进行了前期探索应用，被证明能够取代硫化钠有效抑制辉钼矿。

Inhibitor EF1309 for Pyrite and Marcasite Flotation

This reagent can effectively inhibit pyrite under low alkalinity condition, which can solve the problems of pipeline clogging and flotation water of too high pH value brought about by massive use of lime, etc. It can be widely used in flotation of copper-sulfur separation and zinc-sulfur separation, and in flotation of other nonferrous metals. The goal of mineral inhibition is achieved by improving the surface hydrophilicity of target minerals and reducing the adsorption of collectors.

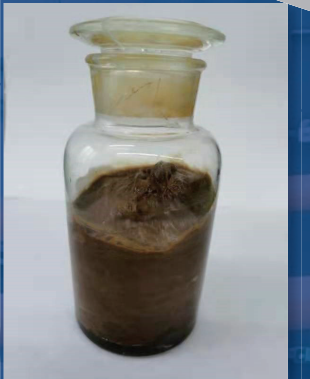
Applications:

A copper mine in South America produces kaolin and secondary copper-containing copper sulfide, where a combination of EF1309 and lime is used as inhibitor for pyrite. This enables a separation of copper sulfide at low basicity and can effectively improve the operation recovery of Cu and Au. Compared with traditional high basicity process, the operation recovery of Cu and Au is increased by 1.5% and 5% percentage points respectively with the right Cu concentrate. This technology has received two national invention patents in China.

This reagent was first tested and applied in the zinc-sulfur separation process of a copper-lead-zinc process plant in Qinghai, it can effectively improve the zinc-sulfur separation efficiency; it was also used in the molybdenum bismuth separation process of a polymetallic mine in Hunan as an early-stage exploratory application, which proved that this reagent can replace sodium sulfide to inhibit bismuthinite effectively.

CK系列白钨捕收剂

CK-1, CK-2, CK-3系列白钨矿捕收剂适用于各类型白钨矿的浮选，该产品绿色、环保、易降解，具有良好的捕收性和选择性，尤其是对含泥量大的细粒级白钨矿具有较好的浮选性能，浮选泡沫清爽、易破，生产稳定。该药剂水溶性好，性质稳定，耐低温，适应性强，具有多种与白钨矿物作用的官能团，促进捕收剂在白钨矿表面的吸附，强化捕收剂与白钨矿表面作用的稳定性，增加其疏水性，从而实现白钨矿的高效浮选。



应用业绩：

该药剂在中钨高新旗下新田岭、香炉山等选厂进行了应用初探，能够提高白钨矿回收率，经济效益明显。

CK Series Collectors for Scheelite

CK-1, CK-2, CK-3 series collectors These collectors can be used in the flotation of a wide variety of scheelite, they are eco-friendly and easy to degrade, in particular, they have good flotation performance for fine-grained scheelite with large clay content. The flotation froth is clean and easy to burst, and the production is stable. These reagents have the advantages of good water solubility, stable property, low-temperature resistance and strong adaptability, they have many kinds of functional groups which can react with scheelite to accelerate the collector adsorption on the surface of scheelite, can strengthen the stability of the reaction of collectors with the surface of scheelite and enhance the hydrophobicity of scheelite to realize the high efficiency flotation of scheelite.

Applications:

They were tested and applied in Xintianling tungsten concentrator and Xianglushan tungsten concentrator under China Tungsten High-tech Materials Co., Ltd., the recovery of scheelite can be improved with remarkable economic benefits.

低温萤石捕收剂CK-4

一种低温萤石矿捕收剂，在5℃左右的矿浆温度下，仍可直接用于萤石矿浮选，无需加温矿浆，且药剂用量低于常规油酸。大幅降低冬季萤石选矿成本。常规油酸在低温矿浆中弥散性较差，无法与矿物作用上，该药剂大大增强了在水中的弥散性，并且解决了常规萤石捕收剂在低温矿浆环境下弥散效果差的缺点，药剂用量约为普通油酸一半，冬季生产时，可为萤石选厂降低5~15元/t（对原矿）的选矿成本。



应用业绩：

该药剂在河北某300t/d萤石选厂取得工业应用，该厂矿浆加温设备全部停用，节约生产成本200万/年。

Collector CK-4 for Low-Temperature Fluorite

As a collector for low-temperature fluorite, it can be directly used in the flotation of fluorite with the slurry temperature being about 5℃ without the need for heating the slurry, and the reagent dosage is lower than that of the conventional oleic acid. In this way, the flotation cost in winter can be greatly reduced. The conventional oleic acid has poor dispersivity in low-temperature slurry and is not able to react with minerals. This reagent greatly enhanced its dispersivity in water, and it has overcome the disadvantage of poor dispersion of conventional fluorite collector in low-temperature slurry. The reagent dosage is about half of common oleic acid. During winter production, the beneficiation cost of fluorite concentrator can be reduced by 5~15 CNY per ton of ROM ore.

Applications:

This reagent was applied in a 300t/d fluorite concentrator in Hebei, the plant has stopped all slurry heating equipment, saving production cost of 2 million CNY each year.

|| 钼（铜）矿滑石抑制剂CD-1

该药剂能改变滑石表面电性，增加滑石矿物表面的亲水性，同时避免罩盖钼（铜）矿物，从而达到抑制矿物的目的。主要应用于钼（铜）矿选矿，可有效抑制滑石，提高钼（铜）与滑石的分离效率，避免滑石对浮选的不利干扰，大幅度提升精矿品位和回收率，并可实现尾矿水快速沉降、回用。



应用业绩：

该药剂在河南某1.5万t/d滑石型钼矿选矿厂应用，解决了几十年未解决的选矿行业难题，在原矿滑石含量15%以上的条件下，应用CD-1后，钼精矿品位提高15%以上，回收率提高20%以上，为企业创造了良好的经济效益。在秘鲁Las Bambas铜矿进行了小型试验研究，从铜精矿中回收钼，钼精矿品位达到50%以上、回收率90%。

Talc Inhibitor CD-1 for Molybdenum (Copper) Ore

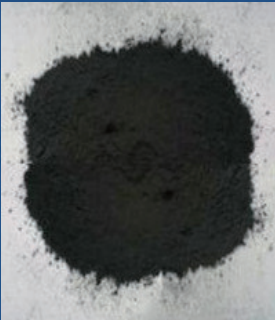
This reagent can change the surface electrical properties and improve the surface hydrophilicity of talc, at the same time, can avoid covering the Mo (Cu) minerals, so as to achieve the purpose of mineral inhibition. It is mainly used in Mo (Cu) ore beneficiation. It can effectively inhibit talc, improve the efficiency of separating Mo (Cu) from talc, avoid the adverse interference of talc on the flotation, substantially improve the grade and recovery of concentrate, and realize the quick settlement and reuse of water contained in tailings.

Applications:

This reagent was applied in a 15,000t/d talc type molybdenum concentrator in Henan, it has solved the unsolved problems in mineral processing industry for decades. Under the condition that the talc content in ROM ore is above 15%, the application of CD-1 has increased the grade of molybdenum concentrate by over 15% and recovery by over 20%, which has created good economic benefits for the plant. A small scale experimental study was carried out in Las Bambas copper mine in Peru to recover Mo from copper concentrate, in which the grade Mo concentrate was over 50% with a recovery of 90%.

|| 铜矿、铅锌矿蛇纹石（滑石）抑制剂CD-2

该药剂用于含蛇纹石（滑石）的铜矿、铅锌矿浮选，可有效抑制蛇纹石（滑石），提高目的矿物与蛇纹石（滑石）的分离效率，同时避免泥化蛇纹石（滑石）对浮选的不利影响，提高选矿回收率和精矿品位，并可实现尾矿水快速沉降、回用。



应用业绩：

该药剂在河北某4000t/d蛇纹石（滑石）型铜矿应用，解决了几十年未解决的选矿行业难题，该矿原矿蛇纹石（滑石）含量高达50%以上，应用CD-2后，铜精矿品位提高10%以上、回收率提高15%以上，为企业创造了良好的经济效益。

Serpentine (talc) Inhibitor CD-2 for Copper Ore and Lead-Zinc Ore

This reagent is mainly used in the flotation of the copper ore and lead-zinc ore that contain serpentine (talc), it can effectively inhibit serpentine (talc), improve the separation efficiency of serpentine (talc) from target minerals, at the same time, avoid the adverse influence of slimed serpentine (talc) on flotation, improve the concentrate grade and recovery, and realize the quick settlement and reuse of water contained in tailings.

Applications:

This reagent was applied in a 4,000t/d serpentine (talc) type copper mine in Henan, it has solved the unsolved problems in mineral processing industry for decades. The serpentine (talc) content in ROM ore of this mine is above 50%, the application of CD-2 has increased the grade of copper concentrate by over 10% and recovery by over 15%, which has created good economic benefits for the plant.

|| 铜镍矿蛇纹石（滑石）抑制剂CD-3

该药剂主要用于铜镍矿提质降镁，可有效抑制铜镍矿中蛇纹石（滑石）等镁硅酸盐矿物，提高铜镍矿物与镁硅酸盐矿物分离效率，避免该类矿物泥化后对浮选的干扰，提高精矿品位和回收率，同时能提高目的矿物上浮速度，缩短工业浮选时间，降低生产成本。



应用业绩：

该药剂在新疆某6000t/d铜镍矿选矿厂进行了前期探索应用，能够降低铜精矿、镍精矿中镁的含量，提高选矿回收率。

Serpentine (talc) Inhibitor CD-3 for Copper-Nickel Ore

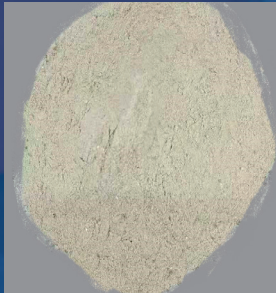
This reagent is mainly used to improve the quality of copper-nickel ore and reduce magnesium content, it can effectively inhibit serpentine (talc) and other magnesium silicate minerals in copper-nickel ore, improve the separation efficiency of Cu-Ni minerals from magnesium-silicate minerals, can avoid the adverse influence of slimed this type of minerals on flotation, improve the grade and recovery of concentrate. At the same time, it can increase the floating velocity of target minerals, shorten the industrial flotation time and reduce production cost.

Applications:

This reagent was used in a 6,000 t/d copper-nickel ore concentrator in Xinjiang as an early-stage test and application, which can reduce the magnesium content in copper concentrate and nickel concentrate, and improve the beneficiation recovery.

|| 碳（石墨）抑制剂CD-4

有机碳（石墨）的浮选抑制剂。主要用于高碳金矿、高碳铜矿、高碳铅锌矿等多金属硫化矿，在中性及碱性条件下对有机碳（石墨）有较好的抑制作用。该药剂可在中性及碱性条件下高效抑制有机碳（石墨），广泛应用于高碳金矿、高碳铜矿、高碳铅锌矿等多金属硫化矿的浮选，大幅度提升选矿指标。



应用业绩：

该药剂在四川某3000t/d铜矿（含碳6%）选矿厂进行了应用，有效实现了铜碳分离，铜精矿品位提高2%、回收率提高5%；在四川某金矿进行了前期探索应用，能够有效降低金精矿中碳的含量，金精矿品位由20g/t提高至40g/t以上。

Carbon (Graphite) Inhibitor CD-4

It is a flotation inhibitor for organic carbon (graphite). It is widely applied in the flotation of high carbon gold ore, high carbon copper ore, high carbon lead-zinc ore and other polymetallic sulfide ores and is effective in inhibiting organic carbon (graphite) under neutral and alkaline conditions. This reagent can effectively inhibit organic carbon (graphite) under neutral and alkaline conditions. It is widely applied in the flotation of high carbon gold ore, high carbon copper ore, high carbon lead-zinc ore and other polymetallic sulfide ores, substantially improving beneficiation indicators.

Applications:

This reagent was applied for the flotation of copper ore (6% carbon) in a 3,000t/d concentrator in Sichuan Province, which effectively separated copper and carbon, increasing copper concentrate grade by 2% and recovery by 5%. Its preliminary research and application in a gold mine in Sichuan also effectively reduced the carbon content in gold concentrate, raising the gold concentrate grade from 20g/t to more than 40g/t.

II 黏土类泥质脉石矿物抑制剂CD-5

该药剂在弱酸-中性-低碱矿浆环境下配合水玻璃使用，可有效降低蒙脱石、绿泥石、方解石、铁白云石等对有色金属硫化矿物浮选的不利干扰，提高精矿品位和回收率，并可实现尾矿水快速沉降、回用。

该药剂可明显改善尾矿细泥难以沉降的问题，具有使用简便、抑制效果好、环保无污染优势。



应用业绩：

该药剂已在新疆某金矿2000t/d选矿厂工业应用，金精矿Au品位由20~30g/t稳定提升至40g/t以上，为矿方增加年利润近500万元。

Inhibitor CD-5 for Clay Type Gangues

This reagent can be used, matched with sodium silicate, in weak acid-neutral-weak alkali slurry and can effectively reduce the influence of montmorillonite, chlorite, calcite, iron dolomite, etc. on the flotation of non-ferrous sulfide ores, improve concentrate grade and recovery, and realize quick settlement and reuse of tailings water.

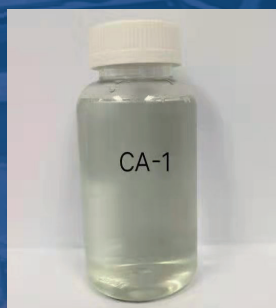
It can significantly improve the issue that fine mud in tailings is difficult to settle, and has the advantages of being easy to use, good inhibition effect, being eco-friendly and without pollution.

Applications:

It was applied in a 2000t/d gold concentrator in Xinjiang, stably improving the gold concentrate grade from 20-30g/t to over 40g/t and the Owner's annual profit being increased by nearly 5 million CNY.

II 氧化锌捕收剂CA-1

该药剂可以有效捕收菱锌矿和异极矿等氧化锌矿物，实现对难选氧化锌的高效回收。主要用作难选氧化锌的有效捕收剂，对异极矿、菱锌矿有着良好的选择性捕收作用。



应用业绩：

该药剂在四川某1000t/d铅锌选厂取得工业应用，使用CA-1后，在原矿Zn品位0.8%~1.5%的情况下，氧化锌回收率较原生产回收率30%大幅提高，达到70%以上。

Collector CA-1 for Zinc Oxide

This reagent can effectively collect smithsonite, hemimorphite and other zinc oxide minerals, and realize efficient recovery of refractory zinc oxides. It is used mainly as the effective collector for refractory zinc oxide and has good selectively collecting effect for smithsonite and hemimorphite.

Applications:

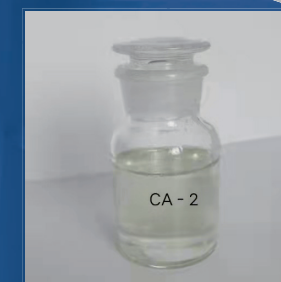
It was applied in a 1,000t/d lead-zinc concentrator in Sichuan Province, by using CA-1, the recovery of zinc oxide was substantially increased by 30% to over 70% under the condition that the zinc grade of ROM ore was 0.8~1.5%.

II 钛铁矿环保捕收剂CA-2

该药剂对钛铁矿捕收能力强，用量少，分选效果好，可显著降低药剂成本，并且绿色环保。主要用作钛铁矿的有效捕收剂，对细粒钛铁矿有着良好的捕收作用。

应用业绩：

该药剂在四川某钛铁矿浮选中进行了探索应用，相对原有捕收剂用量降低50%以上，钛回收率提高3%以上。



Eco-Friendly Collector CA-2 for Ilmenite

This reagent has a strong collecting power for ilmenite, and has the advantages of less dosage, good separating effect, being able to significantly reduce reagent cost, and being eco-friendly. It is an effective collector mainly for ilmenite, and has good collecting effect for fine-grained ilmenite.

Applications:

It was tested and applied in the flotation of ilmenite in a ilmenite concentrator in Sichuan, compared with the original collector, the dosage of collector was reduced by more than 50% and the recovery of Titanium was raised by 3% plus.

II 金浮选增效剂AXJ-1

该药剂用于酸性、中性或者弱碱条件，增效剂的加入，可以改善捕收剂的性能，强化对载金矿物的捕收，提高载金矿物上浮速率，实现金的高效回收。主要用作金的高效浮选，尤其适用于嵌布粒度细、含泥量大的含金黄铁矿的浮选，增效剂能够强化含金硫化矿的捕收，提高上浮速率，从而提高选矿回收率。



应用业绩：

该药剂在新疆某2000t/d金矿选厂应用，提高金回收率2%，经济效益明显。

Synergist AXJ-1 for Gold Flotation

This reagent can be used in acidic, neutral or weakly alkaline conditions, the adding of synergist can improve the performance of collectors, strengthen the collection of gold-bearing minerals, increase the floating rate of gold-bearing minerals and realize the efficient recovery of gold. It is used mainly for the efficient flotation of gold, especially for the flotation of auriferous pyrite with fine dissemination size and a high clay content. The synergist can strengthen the collection of gold-bearing sulfide ores, increase the floating rate, so as to improve the recovery of beneficiation.

Applications:

This reagent was applied in a 2,000t/d gold concentrator in Xinjiang, the gold recovery was increased by 2% with remarkable economic benefits.

II 絮凝剂

性能:对于含微细颗粒废水的絮凝沉降效果明显,具有适用范围广、沉降速度快的优势。

用途:选矿废水、冶金废水的絮凝沉降。



Flocculant

Performance: it shows an obvious flocculation & settling effect on wastewater containing fine particles, and is characterized by wide application range and fast settling rate.

Application: flocculating settlement of mineral process wastewater and metallurgical wastewater

