

SUPPORTING THE MINING INDUSTRY

WE PROVIDE ESSENTIAL CHEMICALS FOR GOLD MINING, MINERAL PROCESSING, AND FIRE ASSAY APPLICATIONS. OUR PRODUCTS ARE TRUSTED FOR THEIR QUALITY, CONSISTENCY, AND AVAILABILITY—HELPING YOU ACHIEVE RELIABLE RESULTS IN EVERY STAGE OF OPERATION.

Why Choose Us?

- With consistent purity and proven performance, our mining-grade materials are engineered to meet the toughest industrial standards while ensuring reliability in every stage of extraction and processing. By maintaining uncompromised quality, we help mining operations achieve higher efficiency, improved recovery rates, and reduced downtime. This unwavering consistency not only drives technical excellence but also delivers the confidence and value that customers can rely on to maximize yield and long-term profitability.
- We guarantee a reliable and uninterrupted supply of mining-grade materials, delivered in secure, industry-compliant packaging that safeguards product integrity from production to site delivery. Our packaging solutions are designed to prevent contamination, ensure safe handling, and withstand the demanding conditions of transport and storage in mining environments. By combining logistical dependability with robust protection, we provide our partners with the confidence that every shipment arrives on time, in perfect condition, and ready to support efficient and continuous operations.
- We provide comprehensive technical support and tailored customization to address the unique challenges of mining operations. Our team of specialists works closely with clients to optimize formulations, adapt solutions to site-specific conditions, and ensure compliance with strict industry standards. By combining hands-on expertise with flexible, customer-driven innovation, we deliver solutions that enhance efficiency, improve recovery processes, and maximize operational performance. More than just a supplier, we act as a trusted partner, offering personalized guidance and adaptive technologies that empower mining companies to achieve sustainable success and long-term profitability.
- With a proven track record across diverse mining industries, we bring decades of experience, trusted expertise, and consistently successful project outcomes. Our solutions have been validated in real-world applications, delivering measurable improvements in extraction efficiency, product quality, and operational reliability. By partnering with leading mining companies worldwide, we have built a reputation for technical excellence, dependable supply, and customer-focused innovation. This legacy of performance not only demonstrates our capability but also gives our partners the confidence that they are working with a reliable and results-driven industry leader.



UNILOX INDUSTRIAL CORPORATION
UNIQUE. INNOVATIVE. COMMITTED.

RELIABLE, HIGH-QUALITY CHEMICALS FOR EFFICIENT MINERAL PROCESSING.



UNILOX INDUSTRIAL CORPORATION

194 M. Concepcion St., San Joaquin, Pasig City
(+632) 8641 - 1001
unilox.com



THIS LIST FEATURES KEY CHEMICAL REAGENTS VITAL FOR OPTIMIZING THE GOLD RECOVERY AND REFINING PROCESS FOLLOWING CYANIDE LEACHING. OUR PRODUCTS ARE SOURCED TO MEET THE STRINGENT DEMANDS OF MODERN MINING OPERATIONS, ENSURING MAXIMUM EXTRACTION AND REGULATORY COMPLIANCE.

PRODUCT	FUNCTION IN GOLD LEACHING & RECOVERY	KEY PROPERTIES & APPLICATION
Activated Carbon	Gold Adsorption (CIP/CIL)	A highly porous carbon material with a massive internal surface area. It is used to efficiently adsorb the gold cyanide complex from the leach slurry in the Carbon-in-Pulp (CIP) or Carbon-in-Leach (CIL) process, acting as the primary medium for gold capture.
Zinc Dust (Zn)	Gold Precipitation (Merrill-Crowe)	Fine metallic zinc powder used in the Merrill-Crowe process. It precipitates the gold and silver from the clarified leachate solution, reversing the leaching reaction (Zn replaces Au in the cyanide complex) to recover the metals as a solid precipitate.
Soda Ash	pH Modifier & Water Treatment	Commercial-grade sodium carbonate (Na_2CO_3) used to adjust the alkalinity of process water. It provides an effective, highly soluble pH control option, aiding in water balance and preventing scale formation in certain process equipment.
Borax	Fluxing Agent (Smelting)	Used in the final stages of refining the gold precipitate (from Merrill-Crowe) or the gold ash (from CIL/CIP). It acts as a flux, lowering the melting temperature of the slag and metal to achieve efficient separation and produce a high-purity gold doré bar.
Feldspar	Slag Conditioner (Smelting)	A common mineral added to the smelting flux mixture alongside borax. It helps control the viscosity and chemical composition of the final slag, ensuring effective separation of impurities from the molten gold metal.
Fluorspar	Fluxing Agent (Smelting)	Calcium fluoride (CaF_2) is used as a powerful flux in the smelting process. It is highly effective at dissolving silica and other refractory materials within the gold concentrate, leading to a cleaner final gold product.

PROCUREMENT NOTE FOR CUSTOMERS

These specialized reagents are not maintained as general stock items. To ensure you receive the precise grade and specification required for your specific ore body and processing conditions (e.g., mesh size for Carbon, reactivity of Zinc Dust), all materials are sourced and certified upon request.

PRODUCTS FOR GOLD MINING

Flux in fire assay

Litharge CG

Litharge CG, or Commercial Grade Lead(II) Oxide (PbO), is a heavy, yellow to reddish crystalline powder produced by oxidizing metallic lead. Widely used in various industries, it serves as a key material in the manufacture of lead-acid batteries, ceramics, specialty glass, and rubber compounding. In mining, it is also applied in assay processes. As a commercial-grade product, Litharge CG offers reliable performance for industrial applications, though it must be handled with care due to the toxic nature of lead compounds.

High purity, golden yellow leadoxide powder | 25kg / bag



For pH adjustment

Calcium Oxide (CO 758)

Commonly known as Quicklime, is presented as an off-white material available in both lump and fine powder forms. It is a highly reactive, essential alkaline chemical used in mineral processing. In gold mining utilizing cyanide leaching, Calcium Oxide is the primary protective alkali. Its critical function is to rapidly raise and maintain the high pH of the leach slurry (typically to pH 10.0 or higher). This high alkalinity is mandatory to prevent the conversion of soluble cyanide into highly toxic and volatile hydrogen cyanide gas (HCN). By ensuring cyanide stability, Calcium Oxide minimizes cyanide loss and protects both personnel and the environment.

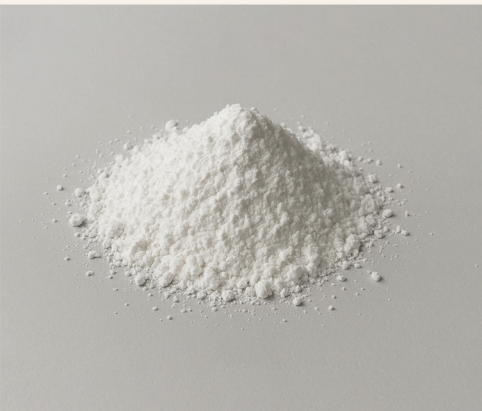
Quicklime, in lumps and powderform | 25kg / bag



Hydrated Lime (HL 757)

HL 757 is a grade of hydrated lime (calcium hydroxide, Ca(OH)_2) commonly used in the mining industry for its strong neutralizing and pH-adjusting properties. It plays a vital role in processes such as flotation, cyanide destruction, and wastewater treatment by controlling acidity and precipitating heavy metals. With its effectiveness in improving recovery and maintaining environmental compliance, HL 757 is an essential chemical in modern mineral processing operations.

Calcium hydroxide, in powder | 25kg / bag



Other product offers

For other requirement, we can develop, source and customize according to your requirement.

