

Black Magic

Premium Mill Grease



Black Magic Premium Mill Grease is a high-performance calcium sulfonate complex grease engineered specifically for the extreme conditions found in steel mill operations. Designed to withstand high temperatures, heavy loads, and water exposure, it delivers reliable, long-lasting protection in the most demanding industrial environments.

CALCIUM SULFONATE COMPLEX TECHNOLOGY

Black Magic utilizes calcium sulfonate complex grease technology, known for its inherent strength, water resistance, and load-carrying capability. Field performance and laboratory testing demonstrate its ability to maintain stability and protection under extreme heat, pressure, and contamination conditions.

PRIMARY APPLICATIONS

Black Magic is intended for use on all steel processing equipment, including:

- Hot strip mill bearings, roll neck bearings, blast furnaces, electric furnaces
- Casters, shears, roughers, finishing stands
- Run-out tables, spindles, and couplings
- Gear systems and heavy-duty industrial components

Black Magic is highly effective in central lubrication systems.

KEY BENEFITS

- Exceptional resistance to mechanical breakdown and shear
- High-load carrying and anti-wear performance
- Excellent water resistance and corrosion protection
- Strong pumpability for use in central lubrication systems
- Formulated without heavy metals
- Performs reliably across a wide temperature range
- Protects against water intrusion, rust, and corrosion
- Reduces wear in high-friction and high-pressure applications
- Extends equipment life in demanding steel processing environments
- Maintains stability under heavy load and continuous operation

HIGH-PERFORMANCE CALCIUM SULFONATE COMPLEX

Black Magic is engineered using calcium sulfonate complex thickener technology, providing a strong molecular structure that resists breakdown under extreme operating conditions — delivering performance that outlasts conventional greases in the most demanding environments.

EXCEPTIONAL SHEAR STABILITY

Black Magic holds its consistency longer without shearing out. It stays "in-grade" under extended use, maintains lubrication effectiveness, and continues to protect equipment through continuous operation and mechanical stress.

HIGH LOAD-CARRYING AND ANTI-WEAR PERFORMANCE

With an impressive Four Ball EP Weld Point of 620 kg minimum, Black Magic produces a tough, reliable film that protects bearings, gears, and all critical contact surfaces from wear, even under extreme pressure and shock loading.

EXCELLENT WATER RESISTANCE

Black Magic resists water washout and spray-off in wet operating environments. It maintains its protective properties in the presence of moisture, preventing corrosion and protecting components in steel mill washdown and cooling water environments.

STRONG PUMPABILITY FOR CENTRALIZED SYSTEMS

Formulated for reliable delivery through central lubrication systems, Black Magic maintains consistent flow characteristics, reducing maintenance demands and ensuring all lubrication points receive adequate protection.

WIDE TEMPERATURE RANGE

With a dropping point above 500°F (260°C), Black Magic performs reliably across a broad temperature spectrum — from standard operating conditions through sustained high-heat environments found in hot strip mills and continuous casting operations.

Typical Physical & Performance Characteristics

Property / Test Method	Grade 1	Grade 1.5	Grade 2
NLGI Grade	1	1.5	2
Cone Penetration, Worked x 60 Strokes, ASTM D-217	310-355	290-335	265-315
Cone Penetration, Worked x 10,000 Strokes	Report	Report	Report
Cone Penetration, Worked x 100,000 Strokes	Report	Report	Report
Dropping Point, °F (°C) min, ASTM D-2265	>500 (260)	>500 (260)	>500 (260)
Kinematic Viscosity (Base Oil) cSt @40°C, ASTM D-445	460 min	460 min	460 min
Four Ball EP Weld Point, kg, ASTM D-2596	620 min	620 min	620 min
Four Ball Wear Scar Width, mm, ASTM D-2266	≤0.60	≤0.60	≤0.60
Water Spray-Off, % Loss, ASTM D-4049	≤30	≤25	≤15
Water Washout, % Loss @ 175°F, ASTM D-1264 Mod.*	≤7	≤5	≤5
Rust Test (Distilled water), ASTM D-1743	Pass	Pass	Pass
Roll Stability, % Change, ASTM D-1831	≤15	≤15	≤15
Thickener Type	Calcium Sulfonate Complex	Calcium Sulfonate Complex	Calcium Sulfonate Complex
Color	Black	Black	Black
Texture	Tacky	Tacky	Tacky
Viscosity Index	90 min	90 min	90 min
VOC's	None	None	None

CHEM AND LUBE

Clinton, NJ 08809 USA • Phone: 908.455.1984

customer.service@chemandlube.com • www.chemandlube.com

