

MAK MULTIPLEX CS GREASE

Premium quality heavy duty calcium sulphonate grease for steel plant application

MAK Multiplex CS Grease is a premium quality high performance grease specially formulated with organic base thickener in refined mineral oil. The calcium sulphonate thickener carries both inherent rust protection and extreme pressure (EP) properties. MAK Multiplex CS Grease is also characterised by very high dropping point, outstanding oxidation stability and excellent water resistance properties. It also exhibits shear stability, wear protection. MAK Multiplex CS Grease exhibits characteristics that are unmatched by other soap or non-soap base greases. It possesses superior mechanical stability which helps retain their structure even at high temperatures and makes them an ideal choice for severe operating conditions offering extended lubrication intervals. MAK Multiplex CS Grease maintains its consistency and EP properties even with high levels of water contamination.

Grades: MAK Multiplex CS Grease is available in the following NLGI Grades – **1** and **2**.

Applications:

MAK Multiplex CS Grease is recommended for lubrication of all industrial bearings operating under conditions of high temperatures, heavy loads and humid environments. This grease is specially designed to meet the demanding lubrication requirements of steel plant equipment. It is also recommended for slip seal applications in rotary kilns, in bearing lubrication of rollers in discharge table of furnaces in steel plants, continuous casters, work-roll bearings and in cement industries. MAK Multiplex CS Grease 1 and 2 are also suitable for use in centralised grease lubrication systems.

Performance/ Benefits:

High Temperature Performance – higher drop point of grease enables to retain its structure even at higher temperatures making the grease well suited to lubricate components efficiently under high temperature conditions.

Outstanding Load Carrying Ability – possesses outstanding EP properties and offers superior protection to the machine components working under heavy loads. Extends equipment life and reduces downtime.

Excellent Oxidation Stability – excellent resistance to the effects of oxidising agents. Ensures reliability and longer operating life.

Extended Regreasing Interval – high structural stability offers improved ability to resist shear and work longer during harsh working conditions.

Reliable Corrosion Protection – protects bearing components from rust and corrosion in humid environments and enhances their life.

Good Water Resistance – offers excellent water washout resistance and also possesses ability to work with high levels of water contamination without losing its consistency. Provides superior lubrication and protection in wet environments.

Excellent Mechanical Stability – offers excellent protection by retaining desired consistency over long service periods even under severe operations.

Very Good Pumpability – good pump-ability even at low temperatures makes it the ideal grease for centralised lubrication systems.

Good Adhesion – smooth and adhesive properties provide a strong protective layer on exposed parts/ components for extended periods.

Performance Level/ Specification:

- Proprietary Grade

Storage & Handling:

The product should be stored inside. Keep it properly sealed to avoid contamination. Avoid freezing. Shelf life is 2 yrs. under protected conditions.

Health & Safety:

It is unlikely to be hazardous when properly used in recommended applications. Contamination of the grease from other oils, greases, chemicals, dirty water etc. can occur during the use. It should be avoided. Regular monitoring of the in-use product is recommended.

**Typical Physico-Chemical Data: MAK Multiplex CS Grease**

| Characteristics | Method | 1 | 2 |
|-------------------------------------------|------------|--------------------|--------------------|
| Appearance | Visual | Smooth | Smooth |
| Color | Visual | Brownish | Brownish |
| Type of Thickener | - | Calcium Sulphonate | Calcium Sulphonate |
| Worked Penetration, @ 25°C 60 strokes | ASTM D217 | 320 | 282 |
| Penetration Change after 1,00,000 strokes | ASTM D217 | 20 | 18 |
| Drop Point, °C | ASTM D2265 | 315 | 315 |
| Operating Temperature Range, °C | - | -10 to 170 | -10 to 170 |
| Emcor Rust Test | ASTM D6138 | 0,0 | 0,0 |
| Copper Corrosion at 100 °C for 24 hrs. | ASTM D4048 | Negative | Negative |