



## Greases of IKL

### EXTREMAL

EXTREMAL - Premium quality Lithium based multi purpose grease manufactured from superior quality base oil and soap meeting ISO 7623:1993.

EXTREMAL is designed for the lubrication of various applications in all types of operating conditions, but particularly where the loads and operation temperature are high and the use of conventional lithium soap greases is limited.

These lithium complex grease are formulated to provide extra protection against wear, rusting and water washout.

EXTREMAL has better water resistance properties compared to sodium soap greases, better high-temperature properties compared to calcium soap greases, and excellent mechanical properties (both resistance to shearing and good ability to be pumped).

The recommended operating temperature range is from -20°C to 130°C but they

may be used at higher temperatures if the lubrication frequency is increased accordingly

### EXTREMAL Benefits

- First-class economy grade for multi-functional use in rolling and sliding bearings
- Reduced wear under heavy or shock loading and vibration for good equipment reliability and availability
- Protection against rust and corrosion and resistance to water washout for equipment protection and good lubrication even in presence of water
- Extended bearing life potential in wet environments for reduced bearing costs and unanticipated downtime

EXTREMAL has improved mechanical stability which characterize the ability of grease to maintain consistency when subjected to mechanical shear forces.

EXTREMAL is the best grease for the professionals servicing the equipment operating with heavy loads and dust environment.

The quality of EXTREMAL Grease is equivalent to EU regulations

DIN 51 502: KP 2 K-30

ISO 7623:1993

### EXTREMAL Properties and Specifications

| Property                     | Method       | Unit               | Value         |
|------------------------------|--------------|--------------------|---------------|
| Color                        | visuell      | -                  | Braun/brown   |
| Thickener type               | -            | -                  | Lithium       |
| Classification               | DIN 51 502   | -                  | KP 2 K-30     |
| NLGI-class                   | DIN 51 818   | -                  | 2             |
| Worked penetration           | DIN ISO 2137 | 0,1 mm             | 265-295       |
| Dropping point               | DIN ISO 2176 | °C                 | > 185         |
| Usage temperature            | -            | °C                 | -30 bis + 120 |
| Usage temperature            | -            | °F                 | -22 bis + 248 |
| VKA welding force            | DIN 51 350-4 | N                  | 3000          |
| Corrosion protection (Emcor) | DIN 51 802   | Korr.-Grad         | 0-0           |
| Resistance to water          | DIN 51 807-1 | Bew.-Stufe         | 1-90          |
| Base oil viscosity at 40 °C  | ASTM D-7042  | mm <sup>2</sup> /s | 130           |
| Corrosion effect on copper   | DIN 51 811   | Korr.-Grad         | 1-100         |

