PRODUCT INFORMATION

A PRODUCT OF AMERICAN CHEMICAL TECHNOLOGIES, INC.



DuraLife 460-1

CSC Grease

DESCRIPTION:

DuraLife 460-1 is a high performance, extreme pressure grease that features a number of distinct advantages as compared to conventional greases. This calcium sulfonate complex thickener produces excellent water resistance and a wider temperature range that has proven to reduce wear, extend equipment life, lower maintenance cost and reduce inventories.

DuraLife 460-1 uses a Super HD base oil formula consisting of a custom blend of ISO 575 base oil and ISO 220 base oils which together yield a finished ISO 460 base oil. This blend results in amplified structural and thermal stability.

The traditional explanation for grease has been to picture it as a sponge soaked in oil. The thickener or soap acts as the sponge while the oil performs the task of lubricating. Now for the first time we have a product, **DuraLife 460-1**, that is a thickener (sponge) which actually contributes to the grease lubricating actions.

Calcium sulfonates have been used for decades as performance additive in engine and gear oils providing extreme pressure properties, corrosion protection, and water resistance. Calcium sulfonate is not used as an "additive" in **DuraLife 460-1**. . . IT IS THE GREASE. This provides the grease with amplified and exceptional inherent properties without the need for additional additives – this is a factor that ensures long grease life and stability while offering unmatched superior performance.

BENEFITS:

- **DuraLife 460-1** contains multiple types of viscosity index improvers which increase the grease's "body" and "tackiness" properties. This premium base oil preparation process coupled with EP and anti-wear additives produce a high load carrying ability and reduce wear. It is ideal for applications where lubricants are subjected to extreme heat, hot water, or steam. Polymers improve water resistance and adhesion making it superior in areas where water impinges on bearings as in steel rolling mills, paper machines, or marble cutting operations.
- DuraLife 460-1 features exceptional structural stability and excellent resistance to water and performance in the presence of water. It also offers extremely effective high temperature performance as well as excellent extreme pressure properties and heavy load carrying capabilities. Many operators have discovered that the unique ability of DuraLife 460-1 to resist washout and squeeze out allows it to significantly extend re-lubrication intervals, reducing grease usage and labor.

DL460-1 4/18/2013

DuraLife 460-1

• **DuraLife 460-1** can be used at a wide range of temperatures. Its viscous consistency not only serves to resist impact and washout, but also creases a protective "collar" to keep out dust, dirt, and other contaminants. **DuraLife 460-1** is recommended for a multitude of applications where water washout or "pounding out" causes frequent re-greasing. It is ideal for many industrial hot and/or wet applications including heavy duty equipment chassis and wheel bearings as well as industrial applications in paper mills, cement plants, mining or rock crushing, metal foundries, chemical manufacturing facilities, plastics plants, sawmills, wastewater treatment plants, and steel mills.

PROPERTIES:

| | Test Method | DL460-1 |
|--------------------------------------|--------------------|-------------------|
| Color | | Green |
| Thickener Type | | Calcium Sulfonate |
| NLGI Grade | ASTM D4950 | 1 |
| Base Oil Viscosity @ 40 °C | ASTM D445 | 460 cSt |
| Dropping Point | ASTM D566 | 316 °C (600 °F) |
| Cone Penetration @ 25 °C | ASTM D217 | |
| Worked | | 325 dmm |
| Worked 100,000 strokes | | +20 dmm |
| Oxidation Stability by OPV @ 100 hrs | ASTM D942 | 1.5 psi drop |
| Rust Test | ASTM D1763 | Pass |
| Oil Separation @25 °C, 24 hrs | ASTM D1742 | 0% |
| Water Washout, wt loss @ 175 °F | ASTM D1264 | 1.50% (MAX) |
| Water Spray off | ASTM D4049 | 7.2% (MAX) |
| EP Properties (Four-Ball Method) | ASTM D2783 | |
| Weld Point | | 500 kgf |
| OK Load (Timken Method) | ASTM D2509 | 65 lb-f |
| Four-Ball Wear | ASTM D2266 | 0.40 mm |
| Wheel bearing leakage | ASTM D1263 | 0.4 g |

The information contained herein is correct to the best of our knowledge. The recommendations or suggestions contained in this bulletin are made without guarantee or representation as to results. We suggest that you evaluate these recommendations and suggestions in your own laboratory prior to use. Our responsibility for claims arising from breach of warranty, negligence, or otherwise is limited to the purchase price of the material. Freedom to use any patent owned by American Chemical Technologies' or others is not to be inferred from any statement contained herein.

DL460-1 4/18/2013