



TECHNICAL DATA

102 Barton Street, St. Louis, Missouri 63104

In-State (314) 865-4100/Out of State 800-325-9962/Fax (314) 865-4107 <http://www.schaefferoil.com>

#286 HI-TEMP GREASE

Hi-Temp Grease is a high temperature synthetic silica-gel, anti-wear extreme pressure grease that is specially formulated for those industrial bearing applications, where extremely high temperature up to 900°F (482°C) are encountered.

Hi-Temp Grease is compounded from a blend of polyethylene glycol synthetic base fluids and silica gel based thickener system. Further compounded into these polyethylene glycol synthetic base fluids and the silica gel based thickener system is a proprietary blend of high temperature anti-wear extreme pressure additive and a combination of molybdenum disulfide and graphite.

As high temperatures occur the High Temperature Grease will gradually soften in consistency without any drippage of the synthetic base fluids in order to carry and spread the molybdenum disulfide and graphite into the bearing clearances and onto the bearing surfaces. As the temperatures continues to become elevated the synthetic base fluids begin to volatilize off cleanly without leaving any residues, varnishes, gums or carbon deposits on the bearing surfaces. Once the synthetic base fluids have completely volatilized off a solid lubricant film consisting of the proprietary high temperature anti-wear extreme pressure additive and the combination of molybdenum disulfide and graphite is left behind to lubricate at temperatures up to 900°F (482°C).

Hi-Temp Grease high temperature extreme pressure additive, molybdenum disulfide and graphite have a natural affinity for metal surfaces. This natural affinity for metal surfaces allows this solid lubrication combination to plate themselves to these surfaces in order to form a long lasting solid lubricant film which not only withstands high temperatures, but also will withstand pressures in excess of 500,000 psi. This long lasting solid lubricant film provides the metal surfaces of the bearings the superior protection they need especially during periods of high shock loading, extreme pressure and vibration.

The solid lubricant film also helps to reduce friction. This reduction in friction results in reduced wear which in turn leads to increased bearing life, energy savings, less downtime and extended lubrication cycles.

High Temperature Grease also has excellent rust and oxidation inhibiting characteristics, very good water resistance and good mechanical and shear stability. Further, the Hi-Temp Grease's adhesive properties prevent the Hi-Temp Grease from washing out, pounding out, splattering or being squeezed out even under the heaviest loads and vibrations.

Continued On Reverse Side

TD-286 (Rev.12/2009)

USES

The following is a brief list of high temperature applications where Hi-Temp Grease can be used.

| | |
|------------------------------|------------------------------|
| Kiln Car Wheels | Soaking Door Pits |
| Conveyors in Ovens | Tenter Frames |
| Coke Oven Door Latches | Pallet Wheels |
| Oven Damper Control Bearings | Dollies and Dogs of Hot Beds |
| Roller Chains | Stack Valves |
| Larry Car Journals | Ingot Buggy Tilt Bearings |
| Charging Cars | Cement Mill Clinker Dryers |
| Furnace Table Bearings | |

TYPICAL PROPERTIES

| | |
|--|-------------|
| NGLI Grade | #1 _ |
| Worked Penetration @ 77°C (ASTM D-217) | 295-305 |
| Type Thickener | Silica |
| Dropping Point °F/°C (ASTM D-2265) | >500°/>260° |
| Four Ball E.P. (ASTM D-2266) | |
| Weld Point, kg | 400 |
| Load Wear Index | 71.51 |
| Four Ball Wear (ASTM D-2266) | |
| Scar Diameter, mm | .58 |
| Timken E.P. (ASTM D-2509) | |
| Ok Load, lbs. | 60 |
| Falex Continuous Load (ASTM D-3233) | |
| Failure Load, lbs | +4500 |
| Base Fluid Properties | |
| Viscosity @ 40°C, cSt (ASTM D-445) | 38.21 |
| Viscosity @ 100°C, cSt (ASTM D-445) | 8.27 |
| Viscosity Index (ASTM D-2270) | 200 |
| Flash Point °F/°C (ASTM D-92) | >435°/>225° |

Packaging: 286 Hi Temp Grease is available in 475lb drums, 140lb kegs and 45lb pails