# Coupling Grease

## High performance industrial coupling grease

### Product description

Coupling Grease is a high performance industrial coupling grease with a consistency which overlaps NLGI grades 0 and 1 and is formulated with a lithium/polymer thickener with inhibitors to protect against corrosion, oxidation, extreme pressure and rust.

The combination of a special thickener and high viscosity base oil/polymer helps prevent the grease from separating in applications with high centrifugal forces and high-torque applications where severe shock loadings, misalignment and vibration occur.

In the ASTM D 4425 High Speed Centrifugal Test, which develops G forces in excess of 36,000 at 15,000 rpm. Coupling Grease is designed to retain its structure under high centripetal acceleration and prevent leakage.

### Customer benefits

- Designed for resistance to centrifugal separation, aiding component protection
- Long service life helps reduce maintenance and grease recharge
- Promotes high load carrying capabilities
- Offers resistance to water washing
- Formulated to stay in place in high speed operations
- Wide operating temperature range from -40°C up to 120°C

### Product highlights

- **Designed for resistance to centrifugal separation**
- **Long service life**
- **Promotes high load carrying**
- **Offers resistance to water wash**
- **Formulated to stay in place**

**Selected specification standards include:**

| | |
|---|---|
| AGMA | Browning |
| DIN | Esco Aandrijvingen BV |
| Esco Drives | Esco Transmissions |
| Eugen Schmidt und Co Getriebe und Antriebselemente GMBH | Falk |
| Fast | ISO |
| Jaure | Koppers |
| Renk | Wartsila |

## Applications

Coupling Grease is recommended for many types of grease lubricated couplings used in industrial equipment. Common grease lubricated couplings include:

1. Geared couplings which have internal and external spur gears that mesh within a common rotating hub connecting the shafts
2. Steel grid couplings which have a convoluted band of flexible spring steel physically linking the hubs together
3. Flexible chain couplings which have a roller chain that meshes with a sprocket cut in each mating hub

Coupling Grease is designed to perform beyond the normal six-month change interval. In field experience this grease has shown its ability to perform satisfactorily beyond three years.

This product should be used in grease couplings that are especially hard to service regularly and those operating under severe conditions.

The high viscosity base oil/polymer mix makes Coupling Grease suitable for use in other industrial and marine applications where the equipment is subject to high water wash, low speeds and heavy or shock loads.

Coupling Grease is recommended for many types of grease lubricated couplings used in trains, metro transits and can also be used in the couplings on high speed transport cars.

1 Tested in special low-test pump test (Esco)

## Approvals, performance and suitable for use

**Approvals**

- Esco Drives (approval request submitted)

**Performance**

Meets requirements of:

- AGMA CG-1 type
- AGMA CG-2 type
- AGMA CG-3 type
- DIN 51 502: GP1K-40
- ISO 6743-09: ISO-LXD(F)CIB1

Operating temperature -40°C up to 120°C

**Suitable for use**

- Browning
- Falk
- Koppers
- Jaure
- Fast
- Esco Transmissions
- Eugen Schmidt und Co Getriebe und Antriebselemente GMBH
- Esco Aandrijvingen BV
- Wartsila
- Renk

## Product Maintenance and Handling

The tacky nature of the product makes hand packing the preferred method of newly installed couplings to ensure even distribution throughout. Normal handling precautions should be observed as with any petroleum-based products. Consult the coupling manufacturers installation instructions for detailed lubricant application procedures. The following procedure outlines a popular lubrication method. Prior to assembly of gear couplings, a coating of grease should be applied to gear teeth. After hand packing, the coupling should be rotated so the grease fitting reaches 4 o'clock and the fitting/plug removed. A short length of 1/4 inch pipe can be affixed, and grease pumped into the coupling until product is observed flowing out the purge opening at 10 o'clock. The pipe should then be removed, and the plugs reinserted. This practice ensures that the coupling is adequately lubricated. Routine relubrication can be accomplished with disassembly using this method. The grease will then be evenly distributed to all moving and sliding surfaces and the full benefits of the product will be realised. Special care needs to be taken when filling "Full Travel" type couplings so the correct amount of grease is charged.

Avoid any spillage of used and unused product to the environment. Product residue, packages and containers should be disposed of at dedicated collection points.

## Typical test data

| Test | Test Methods | Results |
|---|---|---|
| **Shelf Life: 36 months from date of filling indicated on the product label°** | | |
| Appearance | Visual | Dark Brown, Smooth & Tacky |
| NLGI grade | ASTM D217 mod | 1 |
| Penetration worked, mm/10 | ISO 2137 | 349 |
| Thickener type | | Lithium/polymer |
| Base oil type | | Mineral |
| Base oil viscosity at 40°C, mm²/s | ASTM D445 | >3200 |
| Base oil viscosity at 100°C, mm²/s | ASTM D445 | >50 |
| Dropping Point, °C | IP 396 | 215 |
| Bearing corrosion test | ASTM D1743 | Pass |
| Copper Corrosion, 24h/100°C | ASTM D4048 | 1B |
| Koppers Method, K36,24hrs, % | ASTM D4425 | <3 |
| Four ball Weld load, kgf | ASTM D2596 | 315 |
| Density at 15°C, kg/l | IP 530 | 0.92 |
| Guide to usable Temperature, °C (esco test) | | -40 |

°Typical Shelf Life: (a) if stored under normal conditions and (b) can be extended after re-testing

The typical test data set out above does not constitute a specification. It is indicative only and can be affected by allowable production tolerances. Chevron may modify this test data. Modified data will supersede all previous data, so please ensure you refer to the latest version of this Product Data Sheet (PDS).