



# Shell Stamina Grease RL 2

## *Premium quality industrial bearing grease*

**Shell Stamina Grease RL 2 is a high technology grease based on mineral oil with a special diurea thickener to give long life, low wear and shear-stable properties at high temperatures in industrial bearings.**

### Applications

Shell Stamina Grease RL 2 is particularly recommended for use in high temperature (160°C), lightly loaded industrial bearings. It is recommended for use where long operational life and extended re-greasing intervals are an important consideration

### Performance Features

- **Excellent life at high temperatures**
- **Good wear protection**
- **Excellent mechanical stability**
- **Excellent oxidation resistance**
- **Good protection against false brinnelling**
- **Low oil separation**
- **Excellent corrosion protection**
- **Resists water washout**
- **Lead and nitrite free for safe handling**

### High Temperature Performance

The diurea thickener used in Shell Stamina Grease RL 2 has a high melting point and the grease performance is limited only by the properties of the base oil and additive components.

The low volatility and excellent oxidation stability of the base oil are such that they give an excellent service life in bearings operating between -20°C and +160°C. With caution, Shell Stamina Grease RL 2 may, in some circumstances, be used at temperatures up to 180°C, but only if the re-lubrication period is suitably adjusted.

### Corrosion Protection

When a bearing is running, most high quality greases can maintain an adequate lubricating film even when the grease is loaded with water. However, when the grease bearing is idle, corrosion may occur causing pitting which can be destructive. Shell Stamina Grease RL 2 is formulated with corrosion inhibitors to help protect bearing surfaces even when the grease is contaminated with water.

The lubrication properties of Shell Stamina Grease RL 2 are unimpaired by small quantities of salt water.

### Operating Temperature Range

-20°C to +160°C (200°C peak)

### Re-lubrication

Grease life varies considerably from application to application, even with bearings operating under nominally identical conditions. Variables such as air flow, dirt and humidity can have a considerable effect in addition to the more commonly recognized parameters of load, speed and temperature.

The use of Shell Stamina Grease RL 2 usually permits considerable extension of the re-lubrication interval.

### Oxidation Stability

Shell Stamina Grease RL 2 has an excellent high temperature oxidation inhibitor system to ensure that the grease will withstand high operating temperatures without forming deposits. Unlike the metallic soap thickeners used in many greases, the diurea thickener in Shell Stamina Grease RL 2 does not catalyze grease oxidation, indeed the diurea thickener offers inherent anti-oxidant properties. This contributes to longer grease life at higher temperatures.

The base oil component of Shell Stamina Grease RL 2 is a specially selected high viscosity index mineral oil with excellent oxidation and evaporation resistance.

### Sealing

The rheology of Shell Stamina Grease RL 2 is such that at low shear rates and with heating the consistency increases. Consequently, in bearings operating at high temperatures the grease remains in place providing good sealing and continuous lubrication even in the presence of vibration.

## Water Washout

Shell Stamina Greases RL 2 exhibits very good resistance to water washout.

## Health and Safety

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.shell-lubricants.com/msds/>.

If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please call **1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web:

<http://www.shell-lubricants.com/>.

## Advice

For advice on applications other than those described herein, contact your local Shell representative.

### Typical Physical Characteristics

|  |             |
|--|-------------|
| Shell Stamina Grease   | RL 2        |
| 12 – 400 gram cartridges   | 5073053     |
| 120 LB Kegs  | 5073049     |
| NLGI Grade   | 2           |
| Color  | Brown       |
| Soap Type  | Diurea      |
| Base Oil (type)  | Mineral Oil |
| <b>Kinematic Viscosity (ASTM D 445)</b><br>cSt @ 40°C<br>cSt @ 100°C | 100<br>11.3 |
| <b>Cone Penetration (ASTM D 217)</b><br>Worked @ 25°C 0.1 mm         | 280         |
| <b>Dropping Point°C (ASTM D 2265)</b><br>(ASTM D 2265)               | 280         |
| <b>Pumpability</b><br>Long distance                                  | Fair        |

These characteristics are typical of current production. While future production will conform to Shell's specification, variations in these characteristics may occur.