



Previous Name: **Shell Stamina Grease RL**

Shell Gadus S3 T100

Premium quality industrial bearing greases

- **Extra Protection**
- **Extreme Temperature**
- **Polyurea**

Shell Gadus S3 T100 Greases are high technology greases designed to give optimum performance for grease lubrication in industrial bearings.

They are based on mineral oil with a special diurea thickener to give long life, low wear and shear-stable properties at high temperatures.

In high temperature applications Shell Gadus S3 T100 Greases will outperform even fully synthetic (PAO) lithium complex greases proposed in the market

Applications

Shell Gadus S3 T100 greases are particularly recommended for use in high temperature (150°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

- **Outstanding life at high temperatures**
- **Excellent wear protection**
- **Excellent mechanical stability at high temperatures**
- **Excellent oxidation resistance**
- **Good protection against false brinnelling**
- **Low oil separation**
- **Excellent corrosion resistance**
Provides protection from the elements of corrosion
- **Versatile**
- **Water resistant**
Withstands washing with water, preventing loss of protection
- **Lead and nitrite free**
For safe handling

High Temperature Performance

The diurea thickener used in Shell Gadus S3 T100 greases have a high melting point and the grease performance is limited only by the

properties of the base oil and additive components.

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 Gadus S3 T100 greases are formulated with corrosion inhibitors to help protect bearing surfaces even when the grease is contaminated with water.

The lubrication properties of Shell Gadus S3 T100 greases are unimpaired by small quantities of salt water.

Load Carrying Capacity

Although not specifically designated extreme pressure, Shell Gadus S3 T100 greases have been used very successfully in slow moving, loaded large bearings such as those found in Continuous casters in steel plants:

Operating Temperature Range

-20°C to +150°C

With caution, Shell Gadus S3 T100 greases may, in some circumstances, be used at temperatures up to 180°C, but only if the re-lubrication period is suitably adjusted.

index mineral oil with excellent oxidation and evaporation resistance.

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 recognised parameters of load, speed and temperature.

The use of Shell Gadus S3 T100 greases usually permits considerable extension of the re-lubrication interval.

Oxidation Stability

Shell Gadus S3 T100 greases have a superior high temperature oxidation inhibitor system to ensure that they will withstand high operating temperatures without forming deposits. Unlike the soap thickeners used in most greases, the diurea thickener in Shell Gadus S3 T100 greases does not catalyse 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 Gadus S3 T100 greases is a specially selected high viscosity

Sealing

The rheology of Shell Gadus S3 T100 greases 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 Gadus S3 T100 greases exhibit very good resistance to water washout by immersion or spray.

Health & Safety

Shell Gadus S3 T100 greases are unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet.

Typical Physical Characteristics

	NLGI Consistency	
Shell Gadus S3 T100 greases	1	2
Colour	Brown	Brown
Soap Type	Diurea	Diurea
Base Oil (type)	Mineral Oil	Mineral Oil
Kinematic Viscosity @ 40°C mm ² /s 100°C mm ² /s (IP 71/ASTM-D445)	100 11	100 11
Cone Penetration Worked @ 25°C 0.1 mm (IP 50/ASTM-D217)	310-340	265-295
Dropping Point °C (IP 132/ASTM-D566-76)	250	250
Pumpability Long distance	Good	Fair

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