Technical Data Sheet

Formerly Known As: **Shell Stamina Grease RL 2 J**

Shell **Gadus** ***S3 T150J 2***

- Extra Protection
- Extreme Temperature
- Polyurea

Premium Quality Industrial Bearing Greases

Shell Gadus S3 T150 J Grease is a high technology grease designed to give optimum performance for grease lubrication in industrial bearings.
It is 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 T150 J 2 grease will outperform even fully synthetic (PAO) lithium complex greases proposed in the market.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **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.
- **Zinc-free formulation**

  For use in steel plants using reheat furnaces requiring a zinc-free formulation.
- **High Temperature Performance**

  The diurea thickener used in Shell Gadus S3 T150J 2 grease has 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 wuality 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 T150J 2 grease is formulated with corrosion inhibitors to help protect bearing surfaces
- The lubrication properties of Shell Gadus S3 T150J 2 grease is unimpaired by small quantites of salt water.
- **Load carrying capacity**

  Although not specifically designated extreme pressue, Shell Gadus S3 T150J 2 grease has been used very sucessfully in slow moving, loaded large bearings such as those found in continuous casters in steel plants.
- **Oxidation Stability**

  Shell Gadus S3 T150J 2 grease has 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 T150J 2 grease does not catalyse grease ocidation, 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 T150J 2 grease is a specially selected high viscosity index mineral oil with excellent oxidation and evaporation resistance.
- **Sealing**

  The rheology of Shell Gadus S3 T150J 2 grease 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 te presence of vibration.
- **Water Washout**

  Shell Gadus S3 T150J 2 grease exhibits very good resistance to water washout by immersion or spray.

even when the grease is contaminated with water

Main Applications



Shell Gadus S3 T150 J 2 grease is particularly recommended for use in high temperature (150^{0}C), lightly loaded industrial bearings. It is recommended for use where long operational life and extended re-greasing intervals are an important consideration, for example in Steel Mill applications.

Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Help Desk.

Typical Physical Characteristics

Properties			Method	Shell Gadus S3 T150J 2
NLGI Consistency				2
Colour				Brown
Soap type				Diurea
Base Oil (type)				Mineral Oil
Kinematic Viscosity	@40^{0}C	mm^{2}/s	ASTM D445	150
Cone Penetration, worked	@25^{0}C	0.1 mm	ASTM D217	265 - 295
Dropping Point		^{0}C	IP 396	250
Pumpability, long distance				Fair

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

Health, Safety & Environment

- **Health and Safety**

  Shell Gadus S3 T150 J is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

- Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.
- Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from your Shell representative.
- **Protect the Environment**

  Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **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 T150J 2 grease usually permits considerable extension of the re-lubrication interval.

- **Operating Temperature Range**

Operating Temperature Range is from -20^{0}C to +150^{0}C. With caution, Shell Gadus S3 T150J 2 grease may, in some circumstances, be used at temperatures up to 180^{0}C, but only if te re-lubrication period is suitably adjusted.

- Advice

  Advice on applications not covered here may be obtained from your Shell representative.