Technical Data Sheet

Formerly Known As: **Shell Stamina Grease 0511**

Shell **Gadus** ***S3 T460 1.5***

- Heavy Duty Protection
- Extreme Temperature
- Polyurea

Premium Performance High Temperature Extreme Pressure Grease

Shell Gadus S3 T460 Grease is a high technology grease designed to give optimum performance for grease lubrication in loaded low to medium speed industrial bearings, especially in continous steel casting lines.
It is based on mineral oil with a special diurea thickener to give long life, low wear and shear-stable properties at high temperatures.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- The natural oxidation resistance of the polyurea thickener system in combination with a high viscosity, high VI, highly refined mineral oil imparts excellent high temperature performance under extreme service conditions, preventing grease hardening. This is further enhanced by the incorporation of a extreme pressure additive package that gives further boundary lubrication protection on slow moving bearings.
- Outstanding perfomance in centralized lubrication systems due to metal free thickener and no crystals or soap concentrate blocking filters and distributors.
- Good anti-corrosion properties and resistance against water washout.
- Shell Gadus S3 T460 Grease has proven its benefits in Voest Alpine and SMS Demag as well as other concasters.

Main Applications



Shell Gadus S3 T460 Grease was formulated specifically for the lubrication of high temperature, slow moving concast bearings in the steel industry. It can also be used in other high temperature, slow moving bearing applications. Field experiences have demonstrated the benefits of Shell Gadus S3 T460 Grease, achieving lower maintenance costs i.e. less bearing replacement and less maintenance of centralized lubrication systems.

Specifications, Approvals & Recommendations

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

Typical Physical Characteristics

Properties			Method	Shell Gadus S3 T460 1.5
NLGI Consistency				1.5
Colour				Brown
Soap Type				Polyurea
Base Oil (type)				Mineral
Kinematic Viscosity	@40°C	mm^2/s	ISO 3104	460
Kinematic Viscosity	@100°C	mm^2/s	ISO 3104	29
Cone Penetration, Worked	@25°C	0.1mm	IP 50 / ASTM D217	305
Dropping Point		°C	IP 396	250
Four Ball Weld Load		kg minimum	ASTM D2596	315
Emcor Rust Test Rating			IP 220	0 - 0

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 T460 Grease 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 Material Safety Data Sheet, which can be obtained from https://www.epc.shell.com/

- **Protect the Environment**

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

Additional Information

- **Operating Temperature Range**

  Shell Gadus S3 T460 Grease can be used across a wide range of operating temperatures from –10 to + 180^{0}C

- **Advice**

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