Technical Data Sheet

Formerly Known As: **Shell Stamina Grease EP 2**

Shell **Gadus** *S3 T220 2*

- Extra Protection
- Extreme Temperature
- Polyurea

Premium Multipurpose Extreme Pressure Grease

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Cost Savings**

  Reduced grease consumption at high temperatures, as grease resists melting and subsequent leakage, due to the use of the latest diurea thickener technology developed by Shell's "in house" expertise in Japan.

  Reduced maintenance costs since lower bearing replacement rates can be achieved, due to the excellent anti wear properties that are available from the latest technology diurea thickened greases.

  Lower total labour costs, due to the extended lubrication intervals & less downtime that results from using the latest in high performance greases.

  Simplified maintenance programs can be established, resulting from the multi purpose capabilities of this grease and long service lives that are possible.

- **Peace of Mind**

  Proven new technology (not to be confused with 25 year old American polyurea greases), developed in Japan and now being used by bearing manufacturers throughout the world.

  The knowledge that Shell is in FULL control from Research & Development to manufacture & quality assurance in our own ISO approved plants, which have often been audited and passed by quality conscious customers.

  Availability of Shell expertise, to assist in safely developing the cost savings available from the wide range of Shell products.

  No unexpected Product Health & Safety problems, Shell Gadus S3 T220 is free from lead & nitrite & does not require labelling.

  Proven product that has been demonstrated to work in a range of field applications, it benefits from the wide experience gained with Shell Gadus S3 T100.

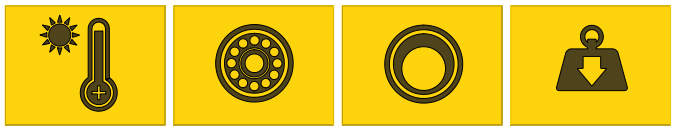
- **Convenience**

  Use of the same grease whatever the lubrication mode, as Shell Gadus S3 T220 is the grease used for the automatic single point lubricator Shell Tactic EMV.

  Guaranteed suitable lubrication of equipment world-wide, as product is part of the International SeaShell range of products, which can be found throughout the world.

  Availability wherever required, Nationally & Internationally (Shell now markets lubricants in more than 100 countries).

Main Applications



- General Engineering, Steel, Paper, Aluminium, Chemical and many others

  Recommended as an extreme pressure grease for highly loaded ball, roller & plain bearing applications at high temperatures where extended service life is required. Proven in the following applications:

- Hot strip mills
- Paper mill bearings (dry end)
- Electrical motors (large)

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 T220 2
NLGI Consistency				2
Colour				Light brown
Soap Type				Diurea
Base Oil (type)				Mineral
Kinematic Viscosity	@40°C	cSt	IP 71 / ASTM D445	220
Kinematic Viscosity	@100°C	cSt	IP 71 / ASTM D445	19
Cone Penetration, Worked	@25°C	0.1mm	IP 50 / ASTM D217	280
Dropping Point		°C	IP 396	260
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 T220 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 http://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 T220 is recommended for use over the temperature range -25°C to 150°C (higher temperatures when tested and lubrication intervals are adjusted).

- **Advice**

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