Technical Data Sheet

- Superior Wear Resistance
- Long Life
- Aluminum Complex

Shell **Gadus** ***S4 OGT***

Open Gear Grease

Shell Gadus S4 OGT is primarly designed for use in very heavy applications and operations under hot ambient conditions, in mining equipment, shovels, draglines and excavators in open cut operations.
Shell Gadus S4 OGT is based on Aluminium Complex soap thickener and high viscosity semi-synthetic base oil containing enhanced extreme pressure and antiwear chemistry.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Excellent load carrying capacity under severe operation conditions**

  Grease contains selected components to ensure excellent resistance to shock and permanently heavy loads.

- **Very high mechanical and thermal stability**

  Grease thickener structure is designed to resist mechanical stress and high temperature.

- **Withstanding severe operation conditions**

  like dust and dirt contamination, water, and changes in temperature. Gadus S4 OGT is optimized for the use in ambient temperatures between -10^{0}C and +50^{0}C. If equipment operates in other ambient, Gadus S4 OG MS or Gadus S4 OGXK should be considered.

- **Maintain adhesive characteristic over time**

  Thanks to advanced polymer technology ensuring durable protection. Forms a dark coating on metal surfaces that is adhesive and highly water resistant.

- **Low Friction**

  Selected components ensure low friction characteristics, lower energy consumption and wear reduction.

- **Environmental compliance**

  Shell Gadus S4 OGT is formulated without chlorinated solvent or lead.

Main Applications

- Open gears on draglines, shovels, excavators, stackers, reclaimers and milling equipment
- Stickshifts
- Circle Rail and rollers
- Heavily loaded, slow moving antifriction bearings
- Bushings
- Open gears in Industrial sector such as cement, waste treatment or steel industry

Specifications, Approvals & Recommendations

Shell Gadus S4 OGT is designed to meet the following specifications:

- Bucyrus SD 4713 (rev June 2011)
- P&H 464 Ver 10, 08-16
- CAT Service Bulletin SEBU6250-26 (July 2017)

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

Typical Physical Characteristics

Properties			Method	Shell Gadus S4 OGT
NLGI Consistency				0
Colour				Black
Soap Type				Al Complex
Base Oil (type)				Semi-synthetic
Solid Lubricant				Yes
Cone Penetration	@25°C	0.1mm	ASTM D217	355 - 385
Product Kinematic Viscosity	@40°C	cSt	ASTM D2983	50 000
Kinematic Viscosity	@40°C	cSt	ASTM D445	4 500
Four Ball Wear Scar		mm maximum	ASTM D2266	0.7
Four Ball Weld Load		kg minimum	ASTM D2596	800
EP Tests - 4 Ball, Load Wear Index		minimum	ASTM D2596	120
Rust Test			ASTM D1743	Pass
Copper Strip	3h @ 100°C		ASTM D4048	2e
Pumpability, Lincoln Ventmeter	@-7°C	seconds maximum	Time to vent from 1800 psi to less than or equal to 600 psi	30
Flow Pressure	@-10°C	mbar maximum	DIN 51805	1 400

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 S4 OGT 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 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

- **Operation Temperatures**

  General maximum operating temperature +140°C if not restricted by specific equipment / application requirements.

- **Advice**

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