



Previous Name: Shell Malleus RN

Shell Gadus S3 Repair

- Running-in and Repair
- Aluminium Complex

Premium Open Gear Running-in Grease Containing Solids

Shell Gadus S3 Repair is a high performance sprayable running-in Aluminium Complex Grease, based on a part synthetic base oil blend and contains micronised graphite as solid lubricant.

The product chemistry is designed to cause a well-controlled smoothening process to reduce surface roughness on new and damaged open gearing.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Shell Gadus S3 Repair not only reduces surface roughness of first time operating open gears but also improves used tooth flanks surface with a "cleaning" and corrective effect allowing longer life operation.
- The product can also be used in case of light tooth damage smoothening surface roughness on the load carrying tooth flanks and increasing the contact area.
- **Superior Running In performance**
Shell Gadus S3 Repair's advanced formulation ensures a well-controlled smoothening process through chemical reaction in the zones being under higher load. This controlled wear process allows the gearing to obtain the maximum load distribution between the girth and pinion gearing.
- **Periodic smooth lapping of tooth profile**
It is considered to be a good maintenance practice to apply a 180 kg drum of Gadus S3 Repair once per year, or every 6000 hrs of operation, to remove fatigue micro-cracks or micro-pitting (not really visible to the naked eye) well before they increase in size, causing long term future irreversible damage.

- **Endorsed by leading Open Gear Manufacturers**
Ferry Capitain, one of the major open gear manufacturers, endorses Shell Gadus S3 Repair.
- **Environmental advices**
Shell Gadus S3 Repair is bitumen and solvent free.

Main Applications



- For mining, cement, steel industries and power stations, open gears on grinding mills, rotary kilns and dryers.
- Shell Gadus S3 Repair is a ready-to-use product, which can be applied through conventional automatic lubrication spraying systems or manual pressurized-air hand spraying equipment.
It is important to consult the appropriate consumption charts to determine the specified quantities of lubricant to apply. Incorrect consumption quantities could result in tooth damage.

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 Repair
NLGI Consistency				00
Colour				Black
Soap Type				Aluminium Complex
Texture			Visual	Tacky
Base Oil (type)				Part Synthetic
Density	@15.5°C	kg/m ³	Gardener Method	1
Kinematic Viscosity	@40°C	mm ² /s	ISO 3104	520
Kinematic Viscosity	@100°C	mm ² /s	ISO 3104	32

Properties			Method	Shell Gadus S3 Repair
Cone Penetration, Worked	@25°C	0.1mm	ASTM D217	400-430
Dropping Point		°C	IP 396	240
Copper Strip Corrosion (3 hrs)	@100°C			1b
Four Ball Weld Load		N		8000
Low Temperature Pumpability (Lincoln Ventmeter)	@400 psi	°C		-30
Rust Test			ASTM D1743	Pass

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 Repair 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**

Automatic spraying system from -15°C to 100°C.

Lubrication film from - 30°C up to 200°C.

- **Advice**

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