



Technical Data Sheet

- Heavy Duty Protection
- Calcium Sulfonate Complex
- Water Resistant

Shell Gadus S3 U22AD 1

Multi-purpose Heavy Duty Grease with Moly

Shell Gadus S3 U22AD 1 is a premium quality, extreme pressure grease developed for the protection and lubrication of enclosed gears, jack shafts, and plain bearings.

The product is formulated with a calcium sulfonate thickener, extreme pressure/anti-wear performance additives and corrosion inhibitors, providing excellent load carrying capacity and component protection in wet environments. The product has excellent mobility and torque response at low ambient temperatures, and features low oil separation rates and excellent mechanical stability.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Very good mechanical stability**
Retains NLGI grade / consistency under severe operating conditions.
- **Excellent load carrying capacity**
Formulated with EP and AW additives to provide component protection under extreme loading conditions.
- **Water resistant**
Resists water 'washout and spray-off' when exposed to moisture or road spray.
- **Effective seal**
Shields against particulate and water ingress
- **Corrosion protection**
Gadus S3 U22AD 1 is designed to protect metal surfaces from corrosion in hostile environments such as exposure to alkaline process fluids, corrosive water (as in road salt spray) or sea water.

Dispensing

Can be manually applied or in centralized lubrication systems due to its excellent low temperature mobility.

Main Applications



- **Enclosed gearing**
- **Screw jacks**
- **Plain bearings (pins and bushings)**
- **Dispensing**

Gadus S3 U22AD 1 can be manually applied or in centralized lubrication systems due to its excellent low temperature mobility.

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 U22AD 1
Thickener type		Calcium Sulfonate
Colour		Grey
Base Oil (type)		Mineral
NLGI Consistency		1
Cone Penetration, Worked	@25°C 0.1 mm	IP 50 / ASTM D217 320 - 340
Dropping Point	°C minimum	ASTM D2265 260
Solids	wt%	1%

Properties			Method	Shell Gadus S3 U22AD 1
Kinematic Viscosity	@40°C	cSt minimum	ASTM D445	24
Kinematic Viscosity	@100°C	cSt minimum	ASTM D445	3.9
Four Ball Weld Load		Kg minimum	ASTM D2596	400
Four Ball Wear Test	40kg; 1h; 75°C; 1200rpm	mm scar maximum	ASTM D2266	0.55
Oil separation 30 hrs	@100°C	%m maximum	ASTM D6184	3
Water Washout Test % loss	@79°C	maximum	ASTM D1264	2
Mobility	@-17.8°C	g/min minimum		20

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**

This product 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 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

- **Advice**

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