Technical Data Sheet

Formerly Known As: **Shell Alvania Grease WR 2, Shell Alvania HD 2, Shell Retinax HD 2**

Shell **Gadus** *S2 V220AC 2*

- Reliable Protection
- Water Resistant
- Red Lithium Calcium

High Performance Multi-purpose Extreme Pressure Grease

Shell Gadus S2 V220AC greases are high quality multi-purpose greases based on high viscosity index mineral oil and a mixed lithium/calcium soap thickener. They contain extreme-pressure, anti-wear, anti-oxidation and anti-corrosion additives to enhance their performance in a wide range of applications.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Excellent mechanical stability even under vibrating conditions.**
  Consistency retained over long periods, even in conditions of severe vibration.
- **Good corrosion resistance.**
  Provides protection from the elements of corrosion.
- **Extended life at moderate temperatures.**
  Allows longer periods between maintenance schedules reducing down-time and grease consumption.
  Demonstrated to work in the field with regreasing intervals above 30,000 kms even for demanding applications such as transmission joints.
- **Good oil separation.**
  Effective lubrication and reliable performance.

Specifications, Approvals & Recommendations

- ASTM D4950 LB

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

Main Applications



- Heavy-duty plain and rolling element bearings operating in the following environments:
- Vibrating conditions
- Heavy load
- High temperature
- Shock load
- Presence of water

Multipurpose convenience, especially in the transport sector where product can be used for both wheelbearings and chassis lubrication of passenger cars, light trucks and heavy duty trucks. These greases are also suitable for construction equipment exposed to intense water washout.

Typical physical characteristics

Properties			Method	Shell Gadus S2 V220AC 2
NLGI Consistency				2
Colour				Red
Soap Type				Lithium/Calcium
Base Oil				Mineral
Kinematic Viscosity	@40°C	cSt	IP 71 / ASTM D445	220
Kinematic Viscosity	@100°C	cSt	IP 71 / ASTM D445	18
Cone Penetration, Worked	@25°C	0.1mm	IP 50 / ASTM D217	265-295
Dropping Point		°C	IP 396	180

Properties		Method	Shell Gadus S2 V220AC 2
Four Ball Weld Load	Kg minimum	ASTM D2596	315

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 S2 V220AC 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 S2 V220AC greases are recommended for the grease lubrication of heavy duty bearings operating up to their maximum rated speed over the temperature range -20^{0}C to 130^{0}C (140^{0}C peak)

- **Advice**

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