Technical Data Sheet

Formerly Known As: **Shell Alvania Grease HDX, Shell Retinax HDX**

Shell **Gadus** *S2 V220AD 2*

- Heavy Duty Protection
- Water Resistant
- Lithium Calcium

High Performance Multi-purpose Grease with Solids

Shell Gadus S2 V220AD Greases are high performance grease for the lubrication of bearings subjected to harsh conditions.
They are based on high viscosity index mineral oil and a mixed lithium/calcium soap thickener and contains extreme-pressure, anti-oxidation, anti-wear, anti-corrosion and adhesion additives. It also contains solids to provide resistance to shock loading.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Good oxidation and mechanical stability**
  Resists the formation of deposits caused by oxidation at high operating temperatures and maintains consistency, reducing leakage.
- **Good corrosion resistance**
  Provides protection from the elements of corrosion.
- **For shock loaded conditions**
  Resists breakdown, softening and subsequent leakage under shock loads.
- **Good adhesion properties**
  Reduces losses and grease consumption.
- **Extreme pressure performance**
  Rig tests confirm EP additives in Shell Gadus S2 V220AD Greases prolong bearing life when subjected to heavy and shock loads.

Main Applications



- Shell Gadus S2 V220AD Greases are recommended for the lubrication of shock loaded heavy duty bearings working in damp hostile conditions. They are well-suited for use in off-highway applications and also for the lubrication of fifth wheels.

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 S2 V220AD 2
NLGI Consistency				2
Colour				Black
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	175
4 Ball Weld Load		Kg	IP 239	315 to 400
Solid Lubricant				min 3%wt

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 V220AD 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 Safety Data Sheet, which can be obtained from https://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**

  Operating Temperature Range -25^{o}C to +120^{o}C, peak 130^{o}C

- **Advice**

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