



Technical Data Sheet

- Extra Protection
- High Temperature
- Red Lithium Complex

Shell Rotella HD Grease

Premium Heavy Duty Grease

Shell Rotella HD Grease is premium multi-purpose grease for on and off-road automotive applications with the versatility for industrial equipment use. It contains the latest additives to offer excellent high temperature oxidation performance and other additives to enhance its anti-oxidation, anti-wear and anti-corrosion properties. Shell Rotella HD Grease is especially suitable for bearings operating at high temperature and under load such as disk brake equipped wheel bearings.

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 such as long distance or off-road driving.

- **Enhanced extreme-pressure properties**

Excellent load-carrying performance.

- **Good water resistance**

Ensures lasting protection even in the presence of large amounts of water.

- **High dropping point**

Provides stability in high speed wheel bearings.

- **Long operational life at high temperatures**

- **Effective corrosion protection**

Helps prevent rust and corrosion.

- Shell Rotella HD Grease is used for wheel bearing and general chassis lubrication in on and off-road vehicles plus general equipment lubrication:

- General chassis and bearing point lubrication

- All around lubrication for bearings and pivot points on equipment

- General farm and construction equipment lubrication

- Home lubrication of doors and lawn equipment

- Industrial uses in conveyors, bearings, springs, and pivot points

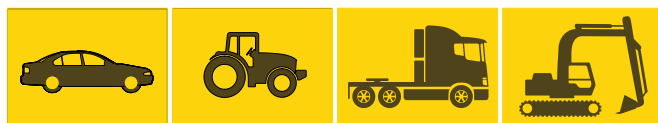
- Automotive Wheelbearings

Specifications, Approvals & Recommendations

- ASTM D4950 GC-LB

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

Main Applications



Typical Physical Characteristics

Properties			Method	Shell Rotella HD Grease
NLGI Consistency				2
Colour				Red
Soap Type				Lithium complex
Base Oil Type				Mineral
Base Oil Viscosity	@40°C	cSt	IP 71 / ASTM D445	220
Base Oil Viscosity	@100°C	cSt	IP 71 / ASTM D445	19
Cone Penetration, Worked	@25°C	0.1mm	IP 50 / ASTM D217	265-295

Properties		Method	Shell Rotella HD Grease
Dropping Point	°C	IP 396	240
Pumpability Long Distance			Fair
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 Rotella HD 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 <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**

Operating temperature range -20°C to 140°C (peak 150°C)

- **Re-greasing Intervals**

For bearings operating near their maximum recommended temperatures, re-greasing intervals should be reviewed

- **Advice**

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