



Formerly Known As: Shell Cyprina Grease RA

Shell GadusRail S2 Traction Motor Bearing Grease Long Life Lithium

High Performance Traction Motor Bearing Grease

Shell GadusRail S2 Traction Motor Bearing grease is one of Shell's highest quality lithium soap based greases. It is manufactured to specifications that provide excellent mechanical stability and long service life. These properties are needed for many critical anti-friction bearing applications. Shell GadusRail S2 Traction Motor Bearing grease is a NLGI Grade 3 grease formulated using mineral base oils.

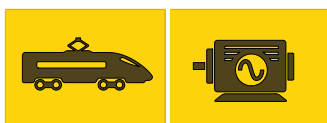
DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Outstanding mechanical stability
- Long service life
- Friction reducer
- Fill-for-life capability

- Traction motor bearings of General Motors Electromotive Diesel and General Electric locomotives.
- Pre-packaged anti-friction bearings intended for "life-time" service without relubrication, a feature highly desired by the railroad industry.

Main Applications



Specifications, Approvals & Recommendations

- General Electric
- General Motors Electromotive Division (EMD)

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

Typical Physical Characteristics

Properties	Method	Shell GadusRail S2 Traction Motor Bearing Grease
Colour	Appearance	Amber, Buttery
Base Oil Viscosity @40°C	cSt	IP 71 ASTM D445 110 - 120
Base Oil Viscosity @100°C	cSt	IP 71 / ASTM D445 10.2
Penetration, dmm Worked, 60X		IP 50 / ASTM D217 230
Dropping Point	°F	Mettler 380
Bomb Oxidation Pressure drop at 100h	psi	ASTM D942 0.8 (5.5 kPa)
Wheel Bearing Leakage @160°C	gm	ASTM D4290 1.1
4 Ball Wear Scar, 1 hr / 1200 rpm / 40 kg @75°C		ASTM D2266 0.6
Oil Separation, 24 hrs @100°C	%	FTM-321 0.6

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 GadusRail S2 Traction Motor Bearing 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

- **Advice**

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