



Shell GadusRail S3 AAR AP 1.5

- Extra Protection
- Wear & Corrosion Resistant
- Lithium

Premium Extreme Pressure Railroad Axle Box Grease

Shell GadusRail S3 AAR AP grease is a long-life railroad grease with extreme pressure additives to provide higher load carrying capacity. This grease meets the requirements of AAR M-942-(Revised 1992) and NSW SRA L343-84.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Extended Bearing Life**
The extreme pressure additives in Shell GadusRail S3 AAR AP provide higher load carrying capacity, reduce bearing wear and bearing failures.
- **Water and Corrosion Protection**
The lithium mixed soap thickener gives the grease superior water resistance and is combined with anti-corrosion additives to further enhance protection of bearing surfaces.
- **Prolonged Grease Service Life**
Shell GadusRail S3 AAR AP resists hardening or softening due to its excellent mechanical stability and therefore lubricates for hundreds of thousands of kilometres in railroad bearings without the need for relubrication.
- **Simplified Inventory**
The overall superior performance of Shell GadusRail S3 AAR AP means it can be used to rationalise grease stocks to one railroad axle bearing grease for all bearing types.

Main Applications



The Association of American Railways (AAR) have developed a grease specification AAR M-942 (Revised 1992), designed to eliminate field lubrication, so that they only have to grease bearings when rail cars are brought to the shop for wheel repair. This practice requires a grease capable of performing in the bearings for hundreds of thousands of kilometres or up to 10 years, without the need for re-lubrication.

Shell GadusRail S3 AAR AP is specifically designed as a long life railway bearing grease meeting the above AAR requirements.

Specifications, Approvals & Recommendations

- AAR M - 942 (REVISED 1992)
- For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell GadusRail S3 AAR AP 1.5
NLGI Consistency				1.5
Colour			Visual	Brown
Soap Type				Lithium
Base Oil (type)				Mineral
Viscosity	@40°C	cSt	ASTM D445	170
Viscosity	@100°C	cSt	ASTM D445	14
Cone Penetration Worked	@25°C	0.1mm	ASTM D217	290 - 320
Dropping Point			°C	ASTM D566-76 180
Timken, OK Load			N minimum	ASTM D2509 400
Four Ball Weld Load			kg	ASTM D2596 250

Properties	Method	Shell GadusRail S3 AAR AP 1.5
Four Ball Wear Scar mm	ASTM D2266	0.5
Four Ball Load Wear Index (LWI)	ASTM D2596	44
Roll Stability (Elevated Temp) Penetration after 96 hrs @82°C 0.1mm	ASTM D8131	334

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 S3 AAR AP 1.5 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

• Advice

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