



Shell Alvania Grease *EPD*

A Long-life Railroad Roller Bearing Grease

Shell Alvania Grease EPD 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-latest revision and NSW SRA L343-84.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Extended bearing life**

The extreme pressure additives in Shell Alvania Grease EPD provide higher load carrying capacity, reduce bearing wear and bearing failures.

- **Water and corrosion protection**

The lithium/calcium 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 Alvania Grease EPD 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 Alvania Grease EPD 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) has developed a grease specification AAR M-942 latest revision, 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 Alvania Grease EPD is specifically designed as a long life railway bearing grease meeting the above AAR requirements.

Specifications, Approvals & Recommendations

- Association of American Railways AAR M - 942 latest revision

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

Typical Physical Characteristics

Properties			Method	Shell Alvania Grease EPD	
NLGI Consistency				1.5	
Colour			Visual	Brown	
Soap Type				Lithium Calcium	
Base Oil Type				Mineral	
Viscosity	@40°C	cSt	ASTM D445	173	
Viscosity	@100°C	cSt	ASTM D445	16	
Cone Penetration Worked	@25°C	0.1mm	ASTM D217	305	
Dropping Point			°C	ASTM D566-76	183
Timken OK Load			kg	ASTM D2509	22.7
4 Ball Weld Load			kg	ASTM D2596	250
4 Ball Wear Scar			mm	ASTM D2266	0.5
4 Ball Load Wear Index				ASTM D2596	44
Roll Stability (elevated temp) Penetration after 96 hours	@82°C	0.1mm	ASTM D217	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 Alvania Grease EPD 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 your Shell representative.

• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

• Operating Temperature Range

From -10°C to +120°C

• Advice

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

