# SHELL ALVANIA EP GREASE D A LONG LIFE RAILROAD ROLLER BEARING GREASE

THICKENER	NLGI	TEMP RANGE	BASE OIL VISCOSITY	EP	WATER RESISTANCE
LITHIUM / CALCIUM	1.5	-10°C <sup>to</sup> +120°C	40°C 100°C 173 16.0 cSt cSt	✓	***

## DESCRIPTION

Shell Alvania EP Grease D 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.

## PERFORMANCE FEATURES

#### • Extended Bearing Life

The extreme pressure additives in Shell Alvania EP Grease D 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 EP Grease D 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 EP Grease D means it can be used to rationalise grease stocks to one railroad axle bearing grease for all bearing types.

## 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 Alvania EP Grease D is specifically designed as a long life railway bearing grease meeting the above AAR requirements.

## **HEALTH & SAFETY**

Shell Alvania EP Grease D is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained. For further guidance on Product Health & Safety refer to the appropriate Shell Product Safety Data Sheet.

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# SPECIFICATIONS/APPROVALS

ASSOCIATION OF AMERICAN RAILWAYS

AAR M - 942 (REVISED 1992)

# TYPICAL CHARACTERISTICS

DESCRIPTION	UNITS	METHODS	TYPICAL
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	16.0
CONE PENETRATION WORKED @ 25°C	0.1mm	ASTM D217	305
DROPPING POINT	О°	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.)	0.1mm	ASTM D217	334
PENETRATION AFTER 96 HOUR @ 82°C			

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