Shell Alvania Greases EP

General purpose extreme-pressure industrial grease

THICKENER	NLGI	TEMP RANGE	BASE OIL VISCOSITY		EP	WATER RESISTANCE
			40 °C	100°C		
LITHIUM	00, 0, 1, 2 & 3	-20°C to +120°C	180 cSt	15.2 cSt	✓	☆☆

Shell Alvania Greases EP offer the excellent performance expected of the world's leading brand of grease.

They are high performance extreme pressure multipurpose greases based on a blend of high viscosity index mineral oils and a lithium hydroxystreate soap thickener and contain lead-free extreme-pressure and other proven performance additives.

Shell Alvania Greases EP are designed for the grease lubrication of rolling element and plain bearings such as those found in the steel, paper, mining, quarrying and construction industries.

Applications

Shell Alvania Greases EP 0 & 00 are specifically designed for:

- Steel mill lubrication where a softer grease is necessary for specialised dispensing systems.
- Heavy duty plain and rolling element bearings operating under severe conditions including shock loading in wet environments
- For gearbox applications where semi-fluid greases are required Shell recommends Alvania GL 00

Shell Alvania Grease EP1 is designed for:

- Heavy duty bearings served by centralised dispensing equipment
- Extreme-pressure gear grease for applications at normal ambient temperature
- Heavy duty plain and rolling element bearings operating under severe conditions including shock loading in wet environments
- Low temperature greasing applications

Shell Alvania Grease EP 2 & 3

are designed for:

- Heavy duty bearings and general industrial lubrication
- Heavy duty plain and rolling element bearings operating under severe conditions including shock loading in wet environments
- Operation over the temperature range -20°C to 100°C for bearings operating at 75% of the maximum rated speed (Can withstand up to 120°C intermittently)

Performance Features

- ***Outstanding load carrying capacity***
  Shell Alvania Greases EP contain special extreme-pressure additives which enable them to withstand heavy and shock loads without failure of the lubricant film.
- ***Superior mechanical stability***
  Exceptional resistance to extended mechanical working. This is particularly important in vibrating environments where poor mechanical stability can lead to grease softening with subsequent loss of lubrication performance and leakage.

- ***Excellent resistance to water wash-out***
  Shell Alvania Greases EP have been formulated to offer superior levels of resistance to water wash-out.

- ***Bearing protection***
  Shell Alvania Greases EP have been designed to help industrial users extend the life of their bearings Standard ASTM and FAG FE9 bearing life tests have been used to demonstrate excellent life-times under representative temperature conditions.

- ***Oxidation stability***
  Specially selected base oil components have excellent oxidation resistance. Their consistency will not alter in storage and they withstand high operating temps without hardening or forming bearing deposits

- ***Excellent corrosion protection***
  Shell Alvania Greases EP have a strong affinity with metal and have the ability to protect bearing surfaces against corrosion, even when the grease is contaminated with water.

Performance Specifications

Meets requirements of major bearing and component manufacturers

Re-greasing Intervals

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

Health & Safety

Shell Alvania Greases EP are 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.

Typical Physical Characteristics

Shell Alvania Grease EP					
NLGI Consistency	00	0	1	2	3
Soap Type	Lithium Hydroxystearate				
Base Oil	Mineral	Mineral	Mineral	Mineral	Mineral
Cone Penetration Worked @ 25℃ 0.1mm (IP 50/ASTM-D217)	400-430	355-385	310-340	265-295	220-250
Kinematic Viscosity @ 40°C cSt 100°C cSt (IP 71/ASTM-D445)	180 15.2	180 15.2	180 15.2	180 15.2	180 15.2
Dropping Point (℃) – IP 132			180	180	180
4 Ball EP Test (kg) – IP 239			250	250	250
Copper Corrosion rating 24h at 100℃ (ASTM D 4048)	1b	1b	1b	1b	1b
Emcor Rust rating Distilled Water (DW) (IP 220)	1/1	1/1	1/1	1/1	1/1

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.