



# SHELL GEAR GREASES TM and TM-H

## Locomotive traction motor gear greases

### Product Description

Shell TM-H Gear Grease and Shell TM Gear Grease are lithium soap thickened gear lubricants containing extreme pressure additives. These products are especially suitable for the lubrication of railroad locomotive traction motor gears.

### Application

Shell TM-H Gear Grease and Shell TM Gear Grease are specifically designed to lubricate the traction motor gear cases of all locomotives including the newest, high horsepower per axle units.

These products should not be used to lubricate anti-friction bearings

### Features

Shell TM-H Gear Grease is a lithium soap thickened traction motor gear lubricant using a high viscosity base oil blend and a sulfur/phosphorus extreme pressure agent. The Brookfield Apparent Viscosity (BAV) is in the range of 15,000-20,000 cP at 200°F. Shell TM-H Gear Grease is best used in situations where leakage is a major problem.

Shell TM Gear Grease is comparable to Shell TM-H Gear Grease but has a slightly lower BAV range of 5,000-10,000 cP at 200°F. The decrease in BAV can be attributed to a slightly lower lithium soap thickener content. Shell TM Gear Grease was developed for railroads preferring a lighter product than Shell TM-H Gear Grease and for cold weather operations.

### Benefits

- long term and efficient gear protection against wear
- excellent lubrication for highly loaded gears
- ability to perform well under all types of conditions

### Recommended for

- Traction motor gear cases of locomotives such as the 900 HP/axle EMD GP-50 and General Electric B-36 locomotives
- Electro-Motive Division of General Motors (EMD) under Specification EMS-1027.

### Product Maintenance

The extremely tacky nature of Shell TM-H Gear Grease and Shell TM Gear Grease necessitate the packaging of these products in sealed one-pound polyethylene bags. The sealed bags are to be added to the top opening of the traction motor gear case. Because the whole bag is added to the gear case, waste is minimized. Otherwise, normal handling procedures should be observed as with any petroleum based products.

Typical Properties for Shell TM Gear Grease

	Test Method	TM-H	TM
Product Code		72525	72527
Appearance		-----Black-----	
Lithium Soap, wt%		1.8	1.5
Texture		---Semi-Fluid, Tacky---	
Brookfield Apparent Viscosity (BAV) 77°F No. 7 Spindle at 4 rpm, cP		500,000	300,000
200°F No. 3 Spindle at 4 rpm cP		17,500	7,500
Timken, OK Load, lbs	D 2509	40	40
Four-Ball EP Load Wear Index, kgf	D 2596	56	56
Weld Point, kgf		315	315

### Handling Practices

For information on the safe handling and use of these products, refer to their Material Safety Data Sheets at <http://www.equivashellmsds.com>. For more information and availability, call 1+800-782-7852 or visit the World Wide Web: <http://www.shell-lubricants.com/>.