

Product Data Sheet



Royal 98 Lithium Complex EP

Grease

High Performance Wheel Bearing, High Temperature, Chassis and Industrial Grease

Royal 98 EP Grease is a premium quality lithium complex EP grease formulated with highly refined base oil and specialty additives to meet severe requirements of automotive wheel bearing, chassis and industrial machinery requirement. The appearance is smooth, somewhat tacky, slightly stringy and blue in color. This grease is capable of operating under wide range of operating conditions from 0°F to 350°F, but has a dropping point of more than 500°F.

Product Features:

- Exceeds the requirement of NLGI GC-LB specification for Automotive Wheel Bearing and Chassis applications
- Outstanding extreme pressure protection
- Wide temperature operability (0 °F to + 350 °F)
- For Medium to high speed bearing with dNm factor 300000-400000
- Superior water resistance and adhesion

Specifications and	Royal 98 LC
Approvals	Grease
NLGI GC-LB	\checkmark

Customer Benefits:

- Resists thinning or hardening in bearings, minimizing leakage and maintaining extended life service
- Specialty additives system minimizes chemical deterioration over extended periods of storage and service. Protects steel and copper alloy bearings against rust and corrosion
- Provides effective wear protection for ball joints, drive shafts and other parts subjected to high pressure and shock loading.
- Offers excellent protection low temperature pumpability and high temperature It effectively resists washout and excessive dilution by water, assuring all-weather lubrication

Applications:

In general, this grease is recommended for extended service in heavy-duty automotive, trucks, buses, farm tractors, construction equipment, high temp wheel bearings (disc brakes), roller & ball bearings, electric motor bearings, throw-out bearings, universal joints, chassis, fifth wheel and other applications. This grease is suitable for medium size high speed bearings. It is a robust multi-purpose grease for a wide range of industrial applications.



Typical Properties

Royal 98 Lithium Complex EP Grease					
Product Number	9100BB	9100BA	9100BF	Test Method	
Color	Blue	Blue	Blue	Visual	
Texture	Smooth, Tacky	Smooth , Tacky	Smooth , Tacky	Visual	
NLGI Grade	1	2	3	ASTM D 217	
Worked Penetration	310-340	265-295	220-250	ASTM D 217	
Change in Pen after 100,000 strokes	30 max	30 max	30 max		
Drop Point , ⁰ F	450 Min	500 Min.	500 Min.	ASTM D 2265	
Viscosity @ 40 C ,cSt	224	224	224	— ASTM D 445 —	
Viscosity @ 100 C ,cSt	17.4	17.4	17.4		
Viscosity @ 100 F ,SUS	1194	1194	1194		
Viscosity @ 210 F ,SUS	89.9	89.9	89.9		
Type of thickener	Lithium complex	Lithium complex	Lithium complex	-	
Weld load, kg	315	315	315	ASTM D 2596	
Wear Scar Dia , mm	0.6	0.6	0.6	ASTM D 2266	
Timken OK load , Ibs	50	60	65	ASTM D 2509	
Water Washout , 175 F , %	-	3.0	1.7	ASTM D 1264	
Water Spray off, % wt.	-	25	18	ASTM D 4049	
Rust Test	Pass	Pass	Pass	ASTM D-1743	
Steel Mobility @ 77 °F	-	390 g/m	-	US Steel Mobility	
@ 0 ºF	-	8.6 g/m	-		

These properties are typical of the current production. Variations that do not affect product performance are to be expected depending on blending and manufacturing locations. The information above is subject to change without notice.

Health and Safety:

This product is unlikely to have any adverse health implications or safety hazards when used for its intended application. Avoid contact with skin, use resistant gloves when handling used oil. If skin comes in contact wash immediately with soap and water. For complete information on safe handling and product characteristics please refer to the Material Safety Data Sheet (MSDS) found on our website. www.royalmfg.com or call (918)-584-2671.

