SHELL ALVANIA® GREASE CG
For couplings used in industrial equipment

Product Description
Shell Alvania® Grease CG is specially formulated with a lithium soap/polymer thickener, which has excellent resistance to oil separation when subjected to the high centrifugal forces normally found in couplings.

Application
Shell Alvania® Grease CG is suitable for all types of grease lubricated couplings used in industrial equipment. Common grease lubricated couplings include:

1. Geared Couplings that have internal and external spur gears that mesh within a common rotating hub connecting the shafts.
2. Steel Grid Couplings that have a convoluted band of flexible spring steel physically linking the hubs together.
3. Flexible Chain Couplings that have a roller chain that meshes with a sprocket cut in each mating hub.

Advanced technology has enabled **Shell Alvania® Grease CG** to perform beyond the normal 6-month change interval. In actual field experience this grease has shown its ability to perform satisfactorily beyond 3 years. This product should be used in all grease couplings, especially in those hard to service or those operating under severe conditions.

Because of its high base oil viscosity, **Shell Alvania® Grease CG** is also suitable for use in other industrial applications where the equipment is subject to high water wash, low speeds and heavy or shock loads.

Features
Shell Alvania® Grease CG has a consistency that overlaps the NLGI grades 0 and 1. This grease is specially formulated with a lithium/polymer thickener and fortified with corrosion, oxidation, extreme pressure and an effective rust inhibitor additive package.

Its high viscosity base oil and tackifier combine to help keep the grease in place and prevent separation. In the ASTM D 4425, High Speed Centrifugal Test, which develops G forces in excess of 36,000 at 15,000 rpm, **Shell Alvania Grease CG** exhibits little or no oil separation**.**

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Benefits

- resistance to centrifugal separation
- extended relubrication frequency
- high load carrying capabilities
- resistance to water washout
- stays in place under high speeds
- corrosion and rust protection
- minimizes coupling wear
- minimizes coupling freeze-up
- use at temperatures up to 325°F
- one grease for all grease coupling types

Based on ASTM D 1478 and D 4693 torque tests, the minimum recommended bearing lubrication service would be -10°F. For coupling service the minimum usable temperature is not dependent upon ease of pumping or bearing breakaway force. Field service confirms problem-free coupling service at -20°F and below. Actual minimum temperature for coupling service would be below -20°F.

Approvals and Recommendations

- AGMA CG-1 type
- AGMA CG-2 type
- AGMA CG-3 type

Shell Alvania® Grease CG is suitable in all types of grease couplings including the following:

- Browning
- Falk
- Koppers
- Fast
- TB Wood's

Product Maintenance

The tacky nature of the product makes hand packing the preferred method of newly installed couplings to ensure even distribution throughout. Normal handling precautions should be observed as with any petroleum-based products. Consult the coupling manufacturer's installation instructions for detailed lubricant application procedures. The following procedure outlines a popular lubrication method. Prior to assembly of gear couplings a coating of grease should be applied to gear teeth. After hand packing, the coupling should be rotated so the grease fitting reaches 4 o'clock, and the fitting/plug removed. A short length of 1/4-inch pipe can be affixed and grease pumped into the coupling until product is observed flowing out the purge opening at 10 o'clock. The pipe should then be removed and the plugs reinserted. This practice insures that the coupling is adequately lubricated. Routine relubrication can be accomplished with disassembly using this method. The grease will then be evenly distributed to all moving and sliding surfaces and the full benefits of the product will be realized. Special care needs to be taken when filling "Full Travel" type couplings so the correct amount of grease is charged.

Typical Properties of Shell Alvania® Grease CG		
	Test Method	
Product Code		71168
NLGI Grade		0/1
Appearance		Dark Brown, Tacky
Lithium Soap/Polymer, wt%		10.0
Viscosity[1] @ 40°C, cSt @ 100°C, cSt	 D 445 D 445	 >3200 >50
Penetration. Dmm Worked, 60X Worked, 10,000X, % Change	D 217	 350 10
Dropping Point, °F	Mettler	320+
Centrifugal Oil Separation, vol %	D 4425	None
Water Spray-Off, wt %	D 4049	< 3
Rust Protection	D 1743	Pass
Timken, OK Load, lbs	D 2509	40+
Four-Ball EP Load Wear Index, kgf Weld Point, kgf	D 2596	 68 400
Four-Ball Wear, mm 1 hr, 75°C, 1200 rpm, 40 kgf	D 2266	0.4
Guide to Usable Temperature Min,°F (Pumping) Min,°F (Bearings) Min,°F (Couplings) Continuous Service, Max,°F Short Exposure, Max,°F		 20 -10 Below -20 250 325

[1] Nominal base oil viscosities without polymers or additives are 680 cSt @ 40°C and 26.1 cSt @ 100°C.

Handling & Safety Information

For information on the safe handling and use of this product, refer to the Material Safety Data Sheet at **http://www.shell-lubricants.com/msds/.** If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please **call 1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: **http://www.shell-lubricants.com/.**