



TECHNICAL DATA SHEET

NOVAGARD[®] EXTREME PRESSURE MULTIPURPOSE GREASE

Whitmore's Novagard[®] extreme pressure aluminum complex base grease can be used in a variety of grease lubricated mining applications. Because of its excellent water resistance, wide operating temperature range, extreme pressure and antiwear characteristics, users have found that Novagard[®] can replace several previously stocked greases. This aids in reducing inventories and lessening the chance of misapplication.

Novagard[®] contains MoS₂ and graphite to provide solid film lubrication which plates out on lubricated components to virtually eliminate metal-to-metal contact, even under severe shock loading conditions. Since it is available in four grades, including one formulated to be pumped at -25°F (-31°C), it is easily applied, both manually or by automatic systems, in virtually all ambient temperatures. With a dropping point in excess of 425°F (218°C), Novagard[®] also provides protection in many elevated temperature applications. This wide operating range allows operators to use a single grade of Novagard[®] under varying weather conditions.

Many equipment applications experience stop and go conditions or reversing direction. This action tends to shear down conventional greases, necessitating frequent relubrication, and may shorten bearing life. Novagard[®] has excellent mechanical stability which allows it to retain its original structure and consistency, even when worked very hard for extended periods of time under varying loads and speeds.

BENEFITS:

- **WATER-RESISTANT** - resists washing out of bearings, which means less frequent relubrication.
- **EXTREME PRESSURE** - protects against shock loads, welding and scoring which results in fewer replacement parts and reduced downtime.
- **OPERATING RANGE** - is easily pumped and protects in temperatures ranging from -25°F to over 400°F which reduces the need for seasonal changeouts.
- **SEALS OUT DIRT AND CONTAMINANTS** - the durable aluminum complex base forms a protective barrier to reduce wear and extend lubricant life.
- **VERSATILE FORMULATION** - ideal for a wide range of operating environments and applications. Helps reduce inventories and prevent misapplication.

APPLICATIONS:

Whitmore's Novagard[®] extreme pressure grease is designed to lubricate antifriction bearings and bushings. It is also recommended for vehicle chassis points and U-joints as well as pivot points and bucket pins on earthmoving equipment. Novagard[®] will provide extended service intervals and reduced wear to draglines, shovels, excavators, trucks, conveyors and other rolling stock as well as in-plant applications.

ASTM #		TYPICAL CHARACTERISTICS			
	Grade	EP 2	EP1	Winter EP 1	EP 0
D-217	Cone Penetration (Worked)	265-295	310-340	325-350	355-385
D-2265	Dropping Point, °F (°C)	>480 (>249)	>480 (>249)	>480 (>249)	>450 (>232)
D-445	Kinematic Viscosity				
	cSt @ 40°C	177	177	91	30
	cSt @ 100°C	14.5	14.5	8.5	4.4
D-2161	Saybolt Viscosity				
	SUS @ 100°F	1,000	1,000	540	151.4
	SUS @ 210°F	76	76	55	41.4
Gardner Method	Density, lb/gal @ 60°F (°C)	7.72	7.85	7.49	7.78
D-2596	Specific Gravity, g/cc @ 60°F (°C)	0.927	0.943	0.899	0.934
	Four Ball EP				
	Weld Point, kg	400	400	400	400
	Load Wear Index	54	54	54	54
D-2266	Four Ball Wear, Scar Width, mm	0.60	0.60	0.65	0.65
D-1743	Rust Test	Pass	Pass	Pass	Pass
D-4048 (Modified)	Copper Strip Corrosion for Greases 212°F (100°C) @ 3 hrs	1B	1B	1B	1B
	Thickener Type	Aluminum Complex	Aluminum Complex	Aluminum Complex	Aluminum Complex
OEM Standard	Low Temperature Pumpability, Lincoln Ventmeter @ 400 psi, °F (°C)	10 (-12)	0 (-18)	-25 (-31)	-45 (-43)

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

PACKAGING

Shuttle Tanks	Drums	Kegs	Pails	Cartridges 50 per case
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THE WHITMORE MANUFACTURING COMPANY

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Performance Under Pressure Since 1893

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