

BioMax Multi-Purpose EP Grease 2

ENVIRONMENTALLY ACCEPTABLE GREASE

Royal Purple's BioMax calcium sulphonate grease, made from a novel, biodegradable, renewable, non-toxic, non-bioaccumulative, synthetic thickener, is formulated for equipment operating in environmentally sensitive areas, and where incidental food contact may occur, as well as other industry applications. This patentable technology provides high-performance, uncompromised protection for greased machinery while meeting environmental standards.

BioMax Multi-Purpose EP Grease delivers exceptional extreme pressure protection and anti-wear properties, high thermal & oxidative stability, and a wide operating temperature range. BioMax grease also provides excellent rust and corrosion protection, and resistance to water displacement and spray-off. This is especially critical in harsh marine environments where equipment is exposed to wet and highly corrosive conditions.

BioMax Multi-Purpose EP Grease 2 is EU Ecolabel, NSF H-1, Kosher & Halal certified. It meets US EPA VGP and 2018 VIDA, and contains **no MOSH and no MOAH**.

APPLICATIONS

Plain and rolling element bearings, open gears, sliding surfaces, and other greased components operating in, but not limited to:

- Marine equipment used in inland waterways, offshore and shipping ports
- Construction and mining mobile and stationary equipment
- Forestry service equipment
- Waterparks and water treatment facilities
- Food manufacturing and pharmaceutical equipment
- Steel mills and other metal foundries
- Power generation

PERFORMANCE ADVANTAGES

- EXCELLENT MECHANICAL STABILITY – Resists shearing and loss of consistency after prolonged rolling/working of the grease
- HIGH LOAD CARRYING CAPACITY - Provides superior protection in heavy rolling and sliding applications and against shock loads
- OUTSTANDING WATER RESISTANCE – Stays in place and resist displacement by water immersion and spray
- EXCEPTIONAL CORROSION & RUST PROTECTION - Prevents internal damage to equipment from chemical attack
- ECO-FRIENDLY - Readily biodegradable grease, with low toxicity to aquatic organisms, formulated with renewable raw materials

SPECIFICATIONS AND APPROVALS

- EU Ecolabel License No. BE/027/004
- US EPA VGP (2013) and VIDA
- NSF H-1 Food Grade
- Kosher Pareve
- Halal

BE/027/004



NONFOOD COMPOUNDS
Program Listed H1

Typical Physical Properties		
Property	Test Method	
NLGI Grade		2
Thickener Type		Ca Sulfonate
Worked Penetration	ASTM D217	265
Base Oil Viscosity @40°C, cSt	ASTM D445	103
Base Oil Viscosity @100°C, cSt	ASTM D445	16.4
Base Oil Viscosity Index	ASTM D2270	173
Dropping Point, °C (°F)	ASTM D2265	>300 (>572)
Oil Separation, Storage @ 25°C, %	ASTM D1742	<1.3
Oil Separation, Con. Sieve @100°C, %	ASTM D1684	<4.8
Water Washout @ 79°C, %	ASTM D1264	<1.5
Roll Stability, dry, %	ASTM D1831	1.90%
Roll Stability, with water, %	ASTM D8022	1.19%
Elastomer Comp, SRE-NBR, volume %	ASTM D4289	+2
Elastomer Comp, SRE-NBR, hardness%	ASTM D4289	-1
Rust and Corrosion Protection		
Corrosion Prevention Test @ 52°C	ASTM D1743	Pass
Corrosion Test, 10% syn. seawater	ASTM D5969	Pass
Rust Test, Emscor 3% NaCl	ASTM D6138	0, 0
Rust Test, Emscor 100% syn. sea water	ASTM D6138	0, 1
Copper Corrosion, 24hr @ 100°C	ASTM D4084	1A
Wear and Extreme Pressure Properties		
Fretting Wear Protection, mg	ASTM D4170	<10
4-Ball Wear Test, Scar Dia., mm	ASTM D2266	<0.45
4-Ball EP Test, Weld Load, kg	ASTM D2596	620
4-Ball EP Test, Load Wear Index	ASTM D2596	105
Timken EP Test, OK Load, lb	ASTM D2509	>75
EP Properties, SRV @ 80°C, N	ASTM D5706	1,300
Useful Temperature Range, °C (°F)	ASTM D5800	-40 to 177 (-40 to 350)

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