



Product Bulletin

LC 5 MOLY EP LITHIUM COMPLEX GREASE

BRAD PENN® LC 5 Moly EP Lithium Complex Grease is a heavy-duty, high performance, extreme pressure (EP) grease fortified with 5% molybdenum disulfide (MoS_2 , commonly referred to as “moly”) to meet Caterpillar’s Multipurpose Molybdenum Grease (MPGM) requirements. It is primarily intended for agricultural, mining, and construction equipment applications, as well as most heavy-duty industrial applications requiring protection from heavy shock loading situations. The presence of moly provides reserve protection in these situations which helps to prevent metal-to-metal contact and costly equipment downtime. The presence of moly is also valuable in unclean environments or when proper re-greasing intervals are not followed.

BRAD PENN® LC 5 Moly EP Lithium Complex Grease utilizes a lithium complex thickener system compounded with premium ISO 220 paraffinic base oil to provide excellent mechanical and structural stability. The grease is characterized by its high dropping point (above 500°F) and is formulated with a state-of-the-art additive package to provide superior rust and corrosion protection, good low temperature pumpability and resistance to water washout. The base oil, thickener, and additive components of **LC 5 Moly EP Lithium Complex Grease** have been specifically selected for their performance enhancements under wet, muddy, slow-speed, high temperature, high load, and heavy-shock load conditions like those encountered in off-road and general construction service. Additionally, it meets the requirements for the following:

- Mack MG-C
- Caterpillar MPGM

BRAD PENN® LC 5 Moly EP Lithium Complex Grease is recommended for use in agricultural, mining, and construction equipment applications, as well as heavily loaded industrial applications that require or would benefit from a moly type grease. Typical applications in construction and agricultural equipment include virtually all lubrication grease points on earthmovers, dozers, backhoes, scrapers, cranes, shovels, etc. In addition to automotive wheel bearing and chassis lubrication, it can also be used in fifth wheels, CV joints, and universal joints. It is also particularly well-suited for heavily loaded pivot pins, spined shafts, or other surfaces subjected to sliding.



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BRAD PENN[®]
LC 5 Moly EP Lithium Complex Grease – Typical Properties

NLGI Grade	Test Method	2
Appearance	Visual	Smooth
Color	Visual	Gray
Thickener Type (soap)	ASTM D-128	Lithium Complex
Thickener Content, wt.%	ASTM D-128	10
Molybdenum Disulfide, wt.%	ASTM D-128	5.0
Dropping Point, °F (°C)	ASTM D-2265	525 (274)
Base Oil Viscosity, cSt @ 40°C	ASTM D-445	305
Base Oil Viscosity, SUS @ 100°F	ASTM D-2161	1421
Viscosity Index	ASTM D-2270	92
Cone Penetration @ 77°F Worked, 60X Worked, 10,000X, % Change	ASTM D-217	280 ±10
Oil Separation, % (max)	ASTM D-1742	6
Water Washout, wt.% loss @ 175°F	ASTM D-1264	8
Rust Prevention, rating	ASTM D-1743	Pass
Bomb Oxidation after 100hrs, psi drop	ASTM D-942	8
Four-Ball Weld Point, kgf (min)	ASTM D-2596	315
Timken OK Load, lbs.	ASTM D-2509	40
Operating Temperature Ranges: Minimum, °F (°C) Maximum Continuous Service, °F (°C)		0 (-18) 450 (232)
Product Code		7817