



SHIELD PLUS MINERAL

PRODUCT DESCRIPTION:

Shield Plus is a Lithium thickened lubricating grease formulated with mineral base oil and improved with extreme pressure (EP) additives to lubricate and protect even in heavy loaded circumstances. Mechanically very stable and easily pumpable due to its smooth consistency.

APPLICATION:

Shield Plus Lithium EP-000 and EP-00 are particularly suitable for the lubrication of enclosed gears and bearings in poorly sealed gear cases on most underground mining machinery with the exception of electric motor gears.

Shield Plus Lithium EP-0 and EP-1 provide good low temperature pumpability and are suitable for centralised lubrication systems and other applications where low temperature performance is required.

Shield Plus Lithium EP-2 is recommended for multipurpose applications in antifriction and plain bearings, bushings and pins under normal operating conditions.

Shield Plus Lithium EP-3 is a stiffer NLGI grade 3 grease recommended for applications where maximum protection against penetration of water or solid contaminants is required.

FEATURES & BENEFITS:

- Reduced wear under heavy or shock loading
- Protection against rust and corrosion
- Resistance to water washout
- Extended bearing life potential
- Good pumpability in centralised systems
- Effective leakage control

NLGI GRADES:

- NLGI 2
- NLGI 3

MEETS OR EXCEEDS THE REQUIREMENTS OF:	NLGI 000	NLGI 00	NLGI 0	NLGI 1	NLGI 2	NLGI 3
DIN 51825	-	-	-	KP1K-20	KP2K-20	KP3K-20
DIN 51826	GP000G-20	GP00G-20	GP0G-20	-	-	-

TYPICAL PROPERTIES:

TEST	ASTM METHOD	SHIELD PLUS					
		NLGI 000	NLGI 00	NLGI 0	NLGI 1	NLGI 2	NLGI 3
Thickener Type		Lithium					
Color		Light Brown					
Texture		Smooth					
Worked Penetration @ 25°C, 60 Strokes	D-217	460	415	370	325	280	235
Dropping Point, °C	D-2265	>160	>160	>160	180	190	190
Timken EP Test, OK Load, lbs	D-2509	40	40	40	40	40	40
4-Ball Wear, Scar, mm	D-2266	0.4	0.5	0.4	0.4	0.4	0.4
4-Ball Weld Load, Kg	D-2596	250	250	250	250	250	250
Base Oil Viscosity @ 40°C, cSt	D-445	320	160	160	160	160	160
Operating Temperature Range, °C		-30 to 110	-30 to 130	-30 to 130	-30 to 130	-30 to 130	-30 to 130

HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further information on Safety Guidelines please refer to MSDS available on our website phoenixlubricants.com