



## Automotive and Artillery Grease

AA Greases are greases of the highest quality. They are made from lithium soap and well-refined mineral oil and incorporate powerful anti-oxidant and anti-corrosion additives. They combine all the properties most often required in a grease and are suitable for AA lubrication requirements, particularly in anti-friction.

### Resistance to Oxidation

Greases have exceptional resistance to oxidation. In part this is due to the high quality of the basic materials that go into them and to the method employed for their manufacture. In addition they contain special oxidation Inhibitors which give them, under both static and dynamic conditions, stability towards oxidation which in fact exceeds that of any ordinary industrial grease. Thus they resist drying out and stiffening not only during prolonged storage but also in prolonged service.

### Mechanical Stability

Many greases break down or even liquefy when subjected to severe mechanical working; under such conditions Industrial Greases retain their original consistency and resist running out even after long periods of services

### Corrosion Protection

Greases are markedly superior to conventional greases in the degree of protection they afford against corrosion. This property – reinforced by a special additive – is so effective that the greases will prevent corrosion in a bearing even when large quantities of water are present.

### Resistance to Water

Greases combine resistance to water equal to that of aluminum soap greases with an extremely high melting point (dropping point), minimum 180°C.

### Temperature Range

Greases are reversible greases: even if high operating temperatures cause them to melt, they will, on cooling, retain their grease characteristics and excellent lubricating properties. At low temperatures they do not become too stiff to be easily pumped in dispensing equipment.

## PGM AUTOMOTIVE & ARTILLERY GREASE

Description	Unit	Method	Typical Values
NLGI NO.		ISO	2
Appearance		Visual	Homogeneous, Light Brown
Texture		Visual	Smooth
Soap Base, Type			Lithium Soap
Penetration, worked 60 strokes@ 25°C	0.1mm	ASTM D 217	250 – 300
Penetration, worked 10000 strokes@ 25°C	0.1mm	ASTM D 217	< 300
Penetration, unworked @ 25°C	0.1mm	ASTM D 217	< 300
Dropping Point	°C	ASTM D 566	180 min
Rust test		ASTM D 1743	Pass
Copper Corrosion, 24 hrs at 77°F		ASTM D4048	1b
Oil Separation,, 18 hrs at 104°F	% wt	IP 121	5.0 max
Water Stability (100000 strokes + water)- (worked 60 strokes)	0.1mm	ASTM D217	-25 to +60
Leakage Tendencies, rpm 660±30 @ 221°F for 6 hrs, deposit on bearing surface	g	ASTM D1263	5 max
Oxidation Stability @ 212°F for 100 hrs	psi	ASTM D942	5.0 max
Shell roll Stability at 18 hrs @ 149°F	0.1 mm	ASTM D1831	20 min
Four Ball Wear test, 1 hr, 40kg, @ 1200rpm, 167°F	mm	ASTM D 2266	0.7 max
Evaporation loss @ 212°F for 22 hrs	% mass	ASTM D972	10 max
Foreign Particle, 125µm or above	µm	IP 134	Nil

**NOTE:** The test data shown in this table are recent average values and are subject to usual tolerance

**Pak Grease Manufacturing Co. (Pvt.) Ltd.**

6, Oil Installation Area, Keamari, Karachi - 75620, Pakistan.

Off. : 021 32851628, 021 32850523, Fax : +92 21 32856382,

Email : mgmt@pakgrease.com.pk, Website : www.pakgrease.com.pk

