

Chem and Lube is a chemical manufacturer of highly engineered synthetic lubricants. A major consideration of our company is to manufacture products that are non-toxic and environmentally friendly. We have succeeded in this respect as it relates to Chem and Lube's Teflon grease, **All-Temp**.

Chem and Lube's Teflon All-Temp Grease

All-Temp is a high performance synthetic grease which is a non-staining, non-toxic multi-purpose lubricant which outperforms all petroleum based greases and many synthetic greases as well. Compared to petroleum based greases which contain many impurities, **ALL-TEMP** is free of contaminants and is one reason why it performs significantly better at higher and lower temperatures and under more demanding conditions.

Synthetic lubricants, by their nature, are not as easily prone to oxidation, emulsification and other destructive chemical reactions which are inherent in petroleum based greases. Chem and Lube has further improved the performance of **ALL-TEMP** by adding special anti-wearing, anti-rusting and anti-oxidative additives.

Petroleum based greases contain impurities which reduce film strength and decrease wear protection. These greases are formed by adding thickeners, such as calcium, sodium or lithium to petroleum based oils which form harmful deposits at high temperatures and solidify at low temperatures.

Petroleum Based Greases

1. Contain impurities which cause harmful viscosity changes and decrease wear protection.
2. Forms gummy deposits and carbon at high temperatures.
3. Hardens at low temperatures.

Chem and Lube's Teflon All-Temp Grease

1. Special ingredients provide excellent viscosity and film strength to reduce wear.
2. Continuous operating temperatures at 350° F, and 500° F for intermittent use.
3. Contains no impurities and remains flexible at -50° F.

Benefits of Teflon All-Temp Grease

- Reduces cost of grease by lasting, on average, four times longer than petroleum based lubricants.
- **All-Temp** is non-flammable, non-staining, non-toxic, clear and environmentally friendly.

ALL-TEMP

Synthetic Multi-Purpose, Heavy Duty Teflon Grease

Composition		Synthetic/Polymer
Visual Appearance		Clear
Shelf Life		> 10 years
Oil Separation Test	ASTM D-1742 60° C 24 Hours	Zero
	120° C 24 Hours	Zero
Viscosity	Brookfield @ 25° C	1350 mcps +/- 100 mcps
Cone Penetration	ASTM D-217 (unworked)	
	@ +25° C	310 +/- 20
	@ -20° C	200 +/- 20
Drop Test	ASTM D-566 @ 250° C	Zero
Flash Point	ASTM D-92	180° C
Continuous Use		
Temperature	Grease remains flexible & stable	-41° C to 204° C
Effect on Copper	ASTM D-1261	Zero
Effect on plastic, steel iron, bronze, acrylic	Electron Microscopy Detection of deterioration	No evidence is observed
Volatility	150° C for 24 hours	< 1%
Evaporation Test	ASTM D-972 85° C for 24 hours	< .3%
Oxidation Induction Time	Bellcore TR-TSY000421	> 20 Minutes
Water Content	Karl Fisher Method	< .001%
Hydrogen Generation	ASTM D-1018	< 30 ppm
Four Ball Wear Test	ASTM D-2266 Scar diameter	0.59mm
Salt Spray Test	ASTM B-117	Pass
Four Ball E. P. Test	ASTM D-2596	
	Load Wear Index	35.25 kg.
	Weld Point	180 kg.
Water Washout	ASTM D-1264	
	37.8° C (100° F)	< 1%
	79.4° C (175° F)	< 1%
Rust Prevention Test	ASTM D-1743	Pass

ALL-TEMP contains Teflon, which is a registered name of the duPont Corporation.