

# PRODUCT Data Sheet

## DeoxIT® L260 & M260 Grease Mechanical & Electrical Applications

### 1. Product Description: CAIG offers two types of DeoxIT® Greases (Lithium-based and Mineral-based)

DeoxIT® Greases are manufactured in semi-solid form for use as a combination cleaning, deoxidizing, protecting and lubricating preparation. Greases protect against oxidation (galvanic corrosion) and are free of mineral acids, sulphurs, alkalis and other noxious components aggressive to metals. DeoxIT® Greases improve performance of electrical contacts and mechanical components that require precise lubrication.

**DeoxIT® Grease Type L260** - Lithium-based preparation. Good lubrication, excellent wear resistance, excellent pressure resistance, excellent oxidation (galvanic corrosion) protection, high dripping-point characteristics. Operating temperatures: -40°C to 260°C.

**DeoxIT® Grease Type M260** - Mineral-based preparation. Excellent lubrication, good wear resistance, excellent oxidation (galvanic corrosion) protection and good dripping-point characteristics. Operating temperatures: -40°C to 260°C

### 2. Formulation: DeoxIT® Greases are offered with or without particles.

- A. **NO particles** (L260Np and M260Np) = Soft, thixotropic grease for lubrication and protection of surfaces. Maximum lubrication for relatively clean surfaces.
- NEW!** B. **NO particles, Infused with DeoxIT® D-Series D100L** (L260DNp and M260DNp) = Soft, thixotropic grease for lubrication and protection of surfaces. Maximum lubrication for relatively clean surfaces. The infusion of DeoxIT® D-Series D100L into the formulation provides an additional film on the metal surface to dissolve corrosion, improve conductivity and provide a moveable/flexible protective film on the surface.
- C. **COPPER particles** (L260Cp and M260Cp) = Use when you require particles (conductive) to assist in oxide and corrosion breakup and good lubrication. Copper is conductive. Use in areas that two contacts will not touch and possibly short. Example: disconnect switches or large connectors and relays.
- D. **ALUMINUM particles** (L260Ap and M260Ap) = Use when aluminum metals are involved to assist break up corrosion. Use in areas that two contacts will not touch and possibly short. Example: aluminum rails, bolts, connectors.
- E. **GRAPHITE particles** (L260Gp and M260Gp) = Graphite provides excellent lubricating and heat transfer characteristics. Use where lubrication is vital and heat absorption and dissipation is important.
- F. **QUARTZ particles** (L260Qp and M260Qp) = Use when you need particles (non conductive) to assist in oxide break up and you require good lubrication and abrasion. Quartz particles assist in breaking up oxidation and corrosion. Quartz is nonconductive.



Home of the DeoxIT® family of  
Environmentally-Safer Contact Cleaners and  
Connector Enhancing Treatments  
Made in USA



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**G. GRAPHITE/QUARTZ particles** (L260GQp and M260GQp) = Use when heat transfer, lubrication and assistance is needed in breaking up oxides and corrosion. Finer particles than the copper.

**H. TEFLON particles** (L260Tp and M260Tp) = Use when lubrication is essential. Teflon particles are nonconductive.

**I. CUSTOM FORMULATIONS** = Contact a CAIG Associate; <http://store.caig.com/s.nl/it.l/id.7/.f>

### 3. Grease Comparison Chart:

Product	Heat Resistance	Water Resistance	Oxidation Resistance *	Oxidation Dissolving
DeoxIT® M260	Excellent	Good	Excellent	Good
DeoxIT® L260	Excellent	Excellent	Excellent	Good
Lithium	Good	Good	Fair	Poor
Lithium Complex	Excellent	Excellent	Fair	Poor
Complex	Excellent	Excellent	Fair	Poor
Bentone Clay	Excellent	Good	Good	Poor
Polyurea	Excellent	Excellent	Good	Poor

\* Oxidation of lubricants can produce sludge, varnish, gum and acid.

### 4. Features/Benefits:

Good lubrication, good abrasion, excellent wear resistance, excellent pressure resistance, excellent oxidation (galvanic corrosion) protection, high dripping-point characteristics. Superior moisture resistance. Resist washout and excessive dilution by water assuring all-weather protection. Excellent mechanical stability. Safe on plastics.

### 5. Uses:

#### Electrical:

Antenna connections, battery terminals, buss bars, commutators, conductor rails, conductors, contactors, disconnects, drying & processing equipment, high amperage/high voltage applications, industrial electrical equipment (lifts, cranes, robotics, etc.), power tools, relays & switches (heavy duty, knife, step, rotary), etc.

#### Mechanical:

Bearings (all types), doors (closures), drives (chain/sprockets), hatch closures, O-rings and seals, linear motion systems, plugs (threaded holes), rack & pinion assemblies, screw devices (jacks, rails), slide bushings, sliding parts, tracks/guides/rails, threaded closures, worm gears, etc.



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## 7. Directions for Use:

1. Turn off, unplug the device.
2. Clean/remove grease, dirt and other contaminations from the surfaces. Use a contact cleaner or degreaser (CAIG Labs., Part Nos. DCC-V510 or DDW-V610).
3. Select the DeoxIT® Grease (with or without particles) that is required for your application.
4. In extreme environmental conditions (salt, humidity, acidic, pollution), pre-treating with DeoxIT® D-Series (unless using DeoxIT® L260DNp Grease) may be recommended.
5. As an external environmental barrier (i.e. antenna connections, audio/video connections, etc.), apply liberally onto the entire surface.
6. For surface that require particles (i.e. disconnect knife switches, etc.), apply a small amount to the metal surfaces, then operate the switch to assist in break up of oxidation and corrosion. A second application may be required.
7. Turn on or energize the part/system.
8. For additional information or unique applications, contact a CAIG Associate;  
<http://store.caig.com/s.nl/it.l/id.7/f>

## 8. Materials Compatibility (Plastics, Rubber, Elastomeric and Metals):

(Rating: Not compatible, Poor, Fair, Good, Excellent).

(Compatibility testing is always recommended)

Material Name	Rating
ABS	Excellent
Nylon	Excellent
Lexan	Excellent
HDPE	Good
LDPE	Good
C.E.Phenolic	Excellent
Epoxy	Excellent
Polycarbonate	Excellent
PMMA	Fair
POM	Excellent
PP	Excellent
PS	Fair
PTFE	Excellent
PVC	Excellent
TPE/Rubber/Varnish	Poor

### IMPORTANT:

**Rating:** Any of the above that fall into the "Fair" and "Poor" categories should be thoroughly tested for compatibility. They may be compatible, however, it will depend on the manufacturing process of the materials. Acrylics, ABS, and polycarbonate, if under stress, may show slight cracking or crazing damage. Test for compatibility before use. On porous materials; i.e. wood, rubber, cloth, some phenolics, semi-cured materials, no liquid or solvents should be used. Occasionally, DeoxIT® will get onto unwanted surfaces, quickly wipe off surface and usually no damage will occur.



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### 9. Technical Information/Specifications:

	TYPE:	M260	L260		TYPE:	M260	L260
Flow Point, min. ....		-30°C	-30°C	Oil Type .....		Mineral	Synthetic Blend
Viscosity @ 100°F, SUS .....		763	785	Soap Type .....		None	Lithium-12 Hydroxy
ASTM Dropping Point .....		260°C	285°C	Soap %, .....			9.52
Specific Gravity @ 20°C .....		1.85	1.87	ASTM - Penetration .....		280	295
Flash Point .....		300°C	300°C	NLGI .....		2	2
<sup>1</sup> Lowest/Best Operating Temp. (general) .....		-30°C	-30°C	Deoxidizer .....		Yes	Yes
<sup>1</sup> Highest Operating Temp. (continuous duty) ....		200°C	200°C	Oxidation Inhibitor .....		Yes	Yes
Acid & Neutralization No. (mg KOH/g) .....		1.15	1.17	Corrosion Inhibitor .....		Yes	Yes
Saponification No. (mg KOH/g) .....		2.79	2.81	Texture .....		Buttery	Short Fiber
Electrical Conductivity (27°C) (10 <sup>-12</sup> ohm <sup>-1</sup> cm <sup>-1</sup> ) ...		0.17	0.17	Color .....		Amber	Amber
<sup>2</sup> Dielectric Constant E <sub>r</sub> .....		2.751	3.236				
(Tanδ) (10 <sup>-4</sup> ) .....							
<sup>2</sup> Dielectric Strength E <sub>d</sub> ..... (kV/cm) .....		54.6	45.9				
<sup>2</sup> Specific Insulation Resistance D (10 <sup>12</sup> ohm-cm) .		5.7	5.9				
		+50/-03	+50/-03				

<sup>1</sup> Temperatures are conservative values for reference only.

<sup>2</sup> **NOTE:** All values are relative to an ambient temperature of 26 to 28°C (approx. 80°F). Dielectric strength value is a statistical average taken from 10 measurings. Voltage measurement taken with 0.5% accuracy. Tests conducted on base material only. Greases with particles may have different measurements.

### 10. Shipping and Additional Information:

#### DeoxIT® L260 and M260 Grease - Non aerosol:

Hazardous: No No Shipping Restrictions  
VOC (%): Less than 1%

#### DeoxIT® L260 and M260 Grease - Aerosols: (Part Nos. L260S-N10 and L260S-N10D)

Hazardous: Yes ORMD (No ground shipping restrictions)  
VOC (%): 20.4%

### 11. Other Information:

RoHS Compliant: **YES**  
VOC Compliant: **YES**

### 12. MANUFACTURER DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, neither CAIG Laboratories, Inc., or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist. All service performed on internal parts and equipment should be provided by qualified technicians.