

DeoxIT®

SM22/SM22D Grease

PRODUCT *Info*

DeoxIT® SM22 and SM22D High Performance Greases

- ▶ **High Stress/High Loads**
- ▶ **Extreme Temperatures, -40 to 240°C**
- ▶ **Shock Load Protection**
- ▶ **Low Wash Out & Oil Separation**
- ▶ **Corrosion, Wear & Water Resistant**

DeoxIT® SM22 Greases are used in the most demanding applications. Manufactured in semi-solid form for use as a combination cleaning, deoxidizing, protecting and lubricating preparation. These products contain a synthetic base oil in a lithium complex thickener system. 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® SM22D Greases also contain DeoxIT® Dx100L, The infused into the formulation providing an additional film on the metal surface to dissolve corrosion, improve conductivity and provide a moveable/flexible protective barrier. This is important when and if the grease is disturbed and separates from the metal surface. When the grease is first applied, the infused DeoxIT® Dx100L transfers to the metal and coats the entire surface; sealing and protecting the metal even if the grease is separated from the surface (vibration or mechanical movement). No other grease does this!

DeoxIT® Grease Type SM22Np:

Lithium-based preparation, 5% molybdenum disulfide, no added particles.
Operating temperatures: SM22Np: -40°C to 260°C.

DeoxIT® Grease Type SM22DNp:

Lithium-based preparation, 5% molybdenum disulfide, infused with DeoxIT® D-Series Dx100L, no added particles.
Operating temperatures: SM22DNp: -40°C to 260°C.



Jar (28 g) Jar (226 g) Nozzle Tip (228 g) Pails (3.6 Kg and 15.9 Kg)

**Custom formulations with particles;
Copper, Aluminum, Quartz, Graphite, Teflon**

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.

USES - 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.

**DeoxIT® Products . . .
used by those who demand the best!**

Apple	Ford	L-3 Communications	Schindler Elevator
Black & Decker	General Electric	Logitech	Switchcraft
Boeing	Hewlett-Packard	McIntosh Labs	Tektronix
Daktronics	Honeywell	Motorola	Union Pacific
Diebold Inc.	Ingersoll Rand	Philips Healthcare	Wayne-Dresser
Dolby Laboratories	Intel	Rane Corp.	Xerox Corp.
Federal Express	John Deere	Roland	and many more!



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



Audio/Video



Computers



Automotive



Communications



Marine



Electrical



Energy



Photography



Security



Medical



Avionics

DeoxIT® SM22/SM22D Greases, with and without particles.

DeoxIT® Grease Type SM22:

Lithium-based preparation, 5% molybdenum disulfide.

DeoxIT® Type SM22Np, No particles

DeoxIT® Type SM22Cp, Copper particles

DeoxIT® Type SM22Ap, Aluminum particles

DeoxIT® Type SM22Qp, Quartz particles

DeoxIT® Type SM22Gp, Graphite particles

DeoxIT® Type SM22GQp, Graphite & Quartz

DeoxIT® Type SM22Tp, Teflon

DeoxIT® Grease Type SM22D:

Lithium-based preparation, 5% molybdenum disulfide, infused with DeoxIT® D-Series Dx100L.

DeoxIT® Type SM22DNp, No particles

DeoxIT® Type SM22DCp, Copper particles

DeoxIT® Type SM22DAp, Aluminum particles

DeoxIT® Type SM22DQp, Quartz particles

DeoxIT® Type SM22DGp, Graphite particles

DeoxIT® Type SM22DGQp, Graphite & Quartz

DeoxIT® Type SM22DTp, Teflon

GREASE PARTICLE DESCRIPTIONS:

No particles: Maximum lubrication for relatively clean surfaces.

Copper particles: Copper particles assist in breaking up oxidation and corrosion. *Copper is conductive.*

Aluminum particles: Use when aluminum metals are involved. Use in areas that two contacts will not touch and possibly short. *Aluminum is conductive.*

Quartz particles: Quartz particles assist in breaking up oxidation and corrosion. *Quartz is nonconductive.*

Graphite particles: Graphite particles assist in heat stability and lubrication. *Graphite is excellent for heat transfer.*

Graphite and Quartz particles: Use when heat transfer, lubrication and assistance is needed in breaking up oxides and corrosion.

Teflon: For superior lubrication and protection of parts.

Custom formulations:

Contact CAIG Team Member at info@caig.com

TYPICAL PROPERTIES (Base material):

TYPE:	SM22	SM22D
Oil Type	Synthetic Blend	
Thickener Type	Lithium Complex	
Thickener %	13.0	13.0
Molybdenum Disulfide	5%	5%
Flow Point, min.	-40°C	-40°C
Viscosity, Kinematic, cSt @40°C	200	200
Viscosity Index	140	139
ASTM Dropping Point	265°C	260°C
Load Wear Index, kg	130	130
Bearing Water Washout, wt loss at 175°F	1.5%	1.5%
Emcor Dynamic Bearing Rust, ASTM D6138	0,1	0,1
DIN 51805 psi at 68°F and -22°F	0.9/3.0	0.9/3.0
Copper Corrosion	1b	1b
Oil separation, wt	1.6%	1.8%
Flash Point	239°C	240°C
¹ Lowest/Best Operating Temperature (general)	-40°C	-40°C
¹ Highest Operating Temperature (continuous duty)	240°C	242°C
Acid & Neutralization No. (mg KOH/g)	1.15	1.17
Saponification No. (mg KOH/g)	2.79	2.81
Electrical Conductivity (27°C)(10 ⁻¹² ohm ⁻¹ cm ⁻¹)	0.17	0.17
² Dielectric Constant E _r	2.75	2.81
Tan δ (10 ⁻⁴)		
² Dielectric Strength E _d (kV/cm)	54.6	45.9
² Insulation Resistance D (10 ⁻¹² ohm-cm)	5.5	5.5
	+50/-03	+50/-03
Penetration, at 25°C	325	330
NLGI	1	1
Deoxidizer	No	Yes (Dx100L)
Oxidation Inhibitor	Yes	Yes
Corrosion Inhibitor	Yes	Yes
Texture	Stringy	Stringy
Color	Gray	Gray/Red

¹ Temperatures are conservative values for reference only.

² **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 measurements. Voltage measurement taken with 0.5% accuracy. Tests conducted on base material only. Greases with particles may have different measurements.

All information and data contained in this literature is believed to be accurate, however, it should not be taken as definitive for all users. Users should thoroughly test advertised products in their application, and independently determine satisfactory results before use in large scale production or manufacturing processes. All information on the comparison chart on the front side of this literature we believe to be reliable and was, in part, provided by the manufacturer. Independent testing should be conducted to determine individual needs for each application.



VOC and RoHS
Compliant

Product Information Sheet
C-SM22, 4/2019



CAIG Laboratories, Inc.

12200 Thatcher Court, Poway, CA 92064 U.S.A.

P: 858/486-8388 | E: info@caig.com

WEB: www.caig.com | www.deoxit.com



MADE IN USA