Electrically Conductive Greases





MG Chemicals offers a full line of electrically conductive greases as easy-to-use options when a contact grease for electrical connection between neighboring components is required. Conductive greases for electronics efficiently lubricate moving parts, offer superior protection against corrosion and help ensure electrical continuity between irregular surfaces.

Features & Benefits

- · Excellent corrosion resistance
- RoHS and REACH compliant
- · Lubricates moving parts
- Prevents pitting and hotspots
- · Wide operating temperature

Applications

- · Connecting battery terminals
- · Bridging electrical gaps on tracks
- Electrical bridging for moving parts, such as rotary switches, connectors, and potentiometers

Silicone-Based

Economical, carbon-filled, conductive lubricating grease

- Resistivity of 63 Ω⋅cm
- Broad service temperature range of -50 to 200 °C

8463A • Silicone-based, silver-filled, conductive lubricating grease

Broad service temperature range of -70 to 200 °C

Silicone-Free

• Carbon-filled, conductive lubricating grease

Resistivity of 104 Ω·cm

• Carbon-filled, conductive, non-lubricating paste

Resistivity of 23 Ω·cm

Emcor Rust Rating

- No corrosion
- 1 No more than 3 rust spots visible to the eye
- 2 Small corroded areas covering <1% of the running track surface
- 3 Corroded areas covering >1% and <5% of the running track surface
- 4 Corroded areas covering >5% and <10% of the running traack surface See comparison chart on the next page for MG Chemical's product Emcor Rust rating.

Electrically Conductive Greases



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PROPERTIES				
Color	Black	Greyish yellow	Black	Black
Filler	Carbon	Silver-coated aluminum	Carbon, graphite	Carbon, graphite
Base Material	Silicone oil	Silicone oil	Synthetic oil	Synthetic oil
Density	1.1 g/mL	1.8 g/mL	1.0 g/mL	1.1 g/mL
Viscosity	80.3 Pa·s	_	128 Pa⋅s	_
Resistivity	63 Ω·cm	<0.2 Ω·cm	104 Ω·cm	23 Ω·cm
Thermal Conductivity @ 25 °C	_	1.0 W/(m·K)	0.29 W/(m·K)	_
Evaporation Loss, 22 h @ 165 °C	2.6%	1.0%	2%	0.3%
Oil Separation, 30 h @ 165 °C	0.4%	0.11%	5%	1.8%
Dropping Point	>304 °C	_	_	>304 °C
Worked Penetration, ½ scale	269	335	_	174
Water Washout @ 38 °C Bearing Dried @ 77 °C	1.3%	_	0.9%	0.2%
Rust Preventive, 48 h @ 52 °C Bearing A Bearing B Bearing C	Fail Pass Fail Fail	_	Pass Pass Pass Pass	Fail Fail Fail Fail
Emcor Rust Test, DI Water, Bearing A	1	_	0	3
Service Temperature	-50 to 200 °C	-70 to 200 °C	-70 to 165 °C	-70 to 165 °C
AVAILABLE PACKAGING				
Net contents	76.2 mL (Tube) 495 mL (Jar) 3.78L (Pail) 18.9L (Pail)	3 mL (Syringe)	85 mL (Tube) 462 mL (Jar) 3.78L (Pail)	25 mL (Jar) 466 mL (Jar) 3.78L (Pail)
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