



Electrical Contact Lubricants



Lubricants designed for electrical switch applications must protect components from wear and corrosion while providing protection against external elements such as dust, humidity, moisture, periods of non-use and wide variations in temperatures. Electrical lubricants should be chosen dependent on contact design (sliding, make and break, slip ring, roller, knife blade, etc.), contact forces, switching amperage requirements and compatibility with plastics, elastomers and metals. Low current switching with low contact forces may require a lubricant with different chemical and physical properties compared to switching high current with high contact forces.

Transportation – Automotive, Truck & Bus, Aerospace, Agricultural Equipment, Construction Equipment, Marine Equipment.

Electronics – Office Automation, Telecommunications, Audio-Visual, Test & Measurement, and Medical Equipment.

Commercial Controls – HVAC, Generators, Elevators and Escalators.

Appliances – Kitchen Appliances, Floor Care, Power Tools, Lawn and Garden Equipment, Commercial Food Equipment, Environmental Controls, Commercial Floor Cleaning Equipment, Vending Machines, and Residential Generators.

Industrial Controls & Factory Automation – Motor Controls, Welding, Robotics, Compressors and Electronic Heat Controls.

The following are just some of the products Syn-Tech Ltd. currently supplies for electrical applications. Many may also be used for light duty mechanical lubrication on gears, slides and bearings.

Static Connector Lubricant

Product	Description	Typical Application	Temp. Range C°
NS-50040-GC	Synthetic Hydrocarbon Silica Thickened	An electrical connector grease for both ferrous and non-ferrous metals. Specifically formulated for long life corrosion protection, vibration damping, fretting control and moisture resistance in elevated temperature environments. Contains a UV tracer.	-40 to 149

Compatible with most engineering plastics including polycarbonate and ABS.

Wide Temperature Range Plastics Friendly Electrical Contact Lubricants

Product	Description	Typical Application	Temp. Range C°
NS-396-G	Synthetic Hydrocarbon Li Soap	For low current applications requiring low arc debris, nonferrous (copper, brass, silver) corrosion protection, excellent mechanical stability, low fluid migration and low evaporation at high temperatures.	-40 to 149
NS-7696-G1	Synthetic Hydrocarbon Li Soap	For low current non-arcing sliding contact switches. Exhibits good corrosion protection on Cu, Cu alloy, Ag, Au and Ni metals in areas of high humidity. Applications include turn signal switches, window lift switches and power seat switches.	-40 to 149
NS-62100-GUV	PFPE Inorganic Thickener	High grade PFPE grease. Low volatility and high oxidation resistance for extended durability in thin films. Extremely wide operating temperature range. Contains an ultraviolet reactive tracer.	-70 to 200

Compatible with most engineering plastics including polycarbonate and ABS.

High Performance Wide Temperature Range Electrical Contact Lubricants

Product	Description	Typical Application	Temp. Range C°
NS-1102-G	Polyol Ester Li Soap	For high current applications requiring extended operation at high temperatures, low arc switching debris, reduced sliding wear and corrosion protection on Cu, Cu alloys, Ag, Au and Ni metals. Excellent mechanical stability, low fluid migration, and low evaporation at high temperatures.	-40 to 150
NS-2213-G	Ester Inorganic Thickened	For high current applications requiring extended operation at high temperatures, low arc switching debris, reduced sliding wear and corrosion protection on Cu, Cu alloys, Ag, Au and Ni metals. Excellent mechanical stability, low fluid migration, and low evaporation at high temperatures. Good water resistance.	-45 to 150
NS-2402-G	Polyol Ester Li Soap	For high current applications requiring low arc switching debris, durability and corrosion protection for Cu, Cu alloy, Ag, Au and Ni metals. Excellent mechanical stability, low fluid migration, good mobility at low temperatures and low evaporation at high temperatures.	-40 to 141
NS-2802-G	Polyol Ester Li Soap	For low and high current applications with excellent protection against sliding contact wear. Good protection against nonferrous metal corrosion due to humidity.	-40 to 149

These products are not compatible with ABS, polycarbonate, polyester, PPO, or PVC plastics, or buna S, butyl, or neoprene elastomers.

Wide Temperature Range Low Arc Debris Contact Lubricants

Product	Description	Typical Application	Temp. Range C°
NS-1702-G	Glycol Inorganic Thickened	Non-melting grease for high current switching with low arc debris. Inhibited for Cu and Ag corrosion with good mechanical and chemical stability. Applications include high current switches, potentiometers and similar devices.	-40 to 149
NS-113-G	Glycol Li Soap	High current switching with low arc debris. Inhibited for Cu and Ag corrosion with enhanced contact antiwear. Also exhibits good mechanical and chemical stability. Applications include high current switches, potentiometers and similar devices.	-40 to 120

These products are not compatible with ABS, polycarbonate, polyester, PPO, or PVC plastics, or buna S, butyl, or neoprene elastomers.

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Our Expertise Syn-Tech Ltd.'s product line has evolved products that satisfy applications of many types. Experience and in-house testing facilities have generated the knowledge to create and modify new and existing products to perform under rigorous demands. Contact our offices for assistance in lubricant selection.

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