



## Automotive Electrical Contact Lubricants



Lubricants designed for automotive electrical applications must protect components from wear and corrosion, while providing protection against external elements such as dust, moisture intrusion, humidity, high engine compartment temperatures and long overnight soaks at -40°C (-40°F). Electrical lubricants should be chosen dependent on contact design (sliding, butt action, slip ring, etc.), contact forces, switching current 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.

### *Some current Syn-Tech Ltd. applications are:*

- Multifunction Switches
- Power Window Switches
- Power Door Switches
- Power Mirror Switches
- Trunk Switches
- Ignition Switches
- Hazard Warning Switches
- Headlamp Switches
- Power Seat Switches
- HVAC Switches

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

### Electrical Connector Lubricants

Product	Description	Typical Application	Temp. Range C°
<b>NS-50040-GC</b>	Synthetic Hydrocarbon Silica Thickened	An electrical connector grease for both ferrous and non-ferrous static electrical connectors. 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 Low Arc Debris Contact Lubricants

Product	Description	Typical Application	Temp. Range C°
<b>NS-1702-G</b>	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
<b>NS-113-G</b>	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

*Not compatible with ABS, polycarbonate, polyester, PPO, or PVC plastics, or buna S, butyl, or neoprene elastomers.*

## Wide Temperature Range Plastics Friendly Electrical Contact Lubricants

Product	Description	Typical Application	Temp. Range C°
<b>NS-396-G</b>	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
<b>NS-3297-G</b>	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.	-45 to 149
<b>NS-7696-G1</b>	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
<b>NS-1709-GD</b>	Synthetic Hydrocarbon Li Soap	For on non-arcing, low current sliding switch contacts where a high quality, low volatility and water washout resistant grease is required. Designed for applications that with higher contact forces. Reduces wear due to vibration.	-40 to 149
<b>NS-62100-GUV</b>	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°
<b>NS-1102-G</b>	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. Applications include transmission neutral start switches and similar high temperature devices.	-40 to 150
<b>NS-2213-G</b>	Ester Clay	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.	-40 to 150
<b>NS-2402-G</b>	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. Applications include transmission neutral start switches and similar high temperature, low current devices.	-40 to 141
<b>NS-2802-G</b>	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. Applications include turn signal switches, window lift switches, power seat switches and ignition switches.	-40 to 149

*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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