



A QUAKER CHEMICAL COMPANY

*Innovation and Experience at Work*

# CHRISTO-LUBE® Fluorinated Lubricants Automotive Applications



## Connectors

*Keep dirt, dust, water, fuel and caustic gases away from contacts for continuous, long-life performance – and to reduce insertion force for easier mating.*

CHRISTO-LUBE® MCG 134	-50°C to 260°C	Exceptionally low evaporation, oil separation and water washout for long-life stability.
CHRISTO-LUBE® MCG 158	-50°C to 225°C	All-purpose grease for underhood parts and connector sealants. Compatible with plastics and elastomers.

## Switches

*Ensure metal contacts slide smoothly to prevent wear debris, the typical cause of intermittent and permanent switch failure.*

CHRISTO-LUBE® MCG 185	-40°C to 160°C	Multifunction, 4WD, headlamp and dimmer switches. Window-lift and seating systems.
CHRISTO-LUBE® MCG 146	-70°C to 150°C	Airbag Clocksprings: Provides a thin lubricant coating to prevent wear and reduce noise of ribbon cable.

## Electromechanical Sensors

*Prevent wear, minimize electrical noise and ensure long operating life by protecting the resistive element with a stay-in-place, self-healing grease.*

CHRISTO-LUBE® MCG 111	-60°C to 230°C	Seals sensor from fuels, solvents, water, salt water, dirt and grime. Compatible with all plastics and elastomers.
CHRISTO-LUBE® MCG 109	-65°C to 250°C	Offers excellent self-healing properties for throttle position, EGR and oil pressure sensors.



## Bearings and Actuators

*CHRISTO-LUBE® is ideal for a wide variety of lube-for-life, underhood bearings and actuators that are exposed to temperatures in excess of 150°C.*

<b>CHRISTO-LUBE® MCG 136</b>	-50°C to 260°C	Bearings in alternators, idlers, compressors, water pumps, turbo and superchargers, air intake and exhaust actuators.
<b>CHRISTO-LUBE® MCG 1011</b>	-30°C to 230°C	Sintered bearings in cooling fans and starter motors.
<b>CHRISTO-LUBE® MCG 112</b>	-50°C to 260°C	ABS/Traction Control Actuators: Excellent resistance to brake fluid.

## Fuel and Chemical Resistance

*Automotive fluids can dissolve traditional lubricants. Because PFPEs are inert, their performance is not affected by automotive fluids, chemicals and gasses – ensuring long-life for automotive parts in harsh operating environments.*

<b>CHRISTO-LUBE® MCG 147</b>	-20°C to 230°C	Brake Boosters
<b>CHRISTO-LUBE® MCG 173</b>	-40°C to 250°C	Power Steering Pumps
<b>CHRISTO-LUBE® MCG 160</b>	-15°C to 250°C	Shock Absorbers and Struts
<b>CHRISTO-LUBE® MCG 111-20</b>	-60°C to 230°C	Fuel Level Sensors and Pumps
<b>CHRISTO-LUBE® MCG 138</b>	-20°C to 230°C	Spark Plug Boots

## Analogs for Chemically Sensitive Plastics & Elastomers

*For CHRISTO-LUBE® analogs to other manufacturers' PFPE oils and greases, including UniFlor™, Carbaflo®, Barrierta®, Kluberalfa®, Fomblin®, Braycote®, NyeCorr®, Zarox, Fluor, Triboflon, Endurex®, Noxlub and Fluotribo, please consult ECL for recommendations.*



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