

# Conductive Grease

ISSUED JUNE 2020

Conductive Grease

Part No: MPS.CG50

Available Size: 50g Tube

## PRODUCT DESCRIPTION




**Marine Protection Systems Conductive Grease** is a corrosion resistant, high temperature (up to 200°C) and electrically conductive grease that is ideal for achieving and maintaining excellent electrical connections in harsh environments.

An excellent low cost mechanical and thermal conductor for irregular or pitted surfaces and loose or vibrating parts, MPS Conductive Grease is designed to prevent closed switches from corrosion, prevent the formation of oxides, sulphides, and other corrosion deposits on metallic surfaces, improve the connection between worn contacts and non-moving mating surfaces, and reduce arcing hot spots.








MPS's CG relies on a proprietary carbon filler rather than traditional metallic particles for electrical conductivity. It is typically used as an electrical ground and is particularly useful when trying to establish excellent connectivity of low voltage systems (i.e. cathodic protection systems), drain static electricity away from moving objects; from low micro-power electronics through to high voltage switchgear.

Conductive Grease is non-hardening and non-melting with a high resistance to water washout. It offers a broad service temperature range with continuing lubrication, and low bleed and evaporation. It is ideal for ground connections, rotating connections, rotary switches, variable capacitors, roller inductors, roller bearings, slip rings, slide connectors, and potentiometers.

## DIRECTIONS

-  Using a zero-residue solvent such as Isopropyl Alcohol, clean and dry all surfaces to be lubricated with a lint-free cloth or brush.
-  Apply a thin, even layer of grease using a spatula or other appropriate applicator.
-  Clean up any excess grease or spillage with inert, absorbent material.

## RECOMMENDED USES

-  Anode stud bolts (any anode type including engine & internal anodes)
-  MPS Shaft Grounding Strap braid
-  Bonding connections
-  Battery terminals
-  Propeller or running gear installation where conductivity is paramount
-  Electrical terminals
-  Cooling system anode connections

CORROSION CONTROL THAT WORKS

# Conductive Grease

## RECOMMENDED USES cont.

PHYSICAL PROPERTIES	
Colour	Black Odour Odourless
Density @ 25oC (ASTM D1475)	1.05g/ml
Viscosity @ 25°C (IPCTM-65 Method 2.4.24.4) (Brookfield, Spindle RV S95, 10rpm)	3.86 Pa.s
Corrosion Resistant	Yes
VOC (Volatile Organic Compound)	0%
Surface Temperature	-50oC to +200oC
Shelf Life (-40oC to +40oC)	5 yrs
GREASE PROPERTIES	
Evaporation Loss, 22hr @ 165oC (ASTM D2595)	2.6%
Oil Separation, 30hr @ 165oC (ASTM D6184)	0.4%
Dropping Point (ASTM D2265) >	304oC
Water Washout @ 38oC (ASTM D1264)	1.3%
Worked Penetration, 60 Strokes, ½ Scale (ASTM D1403)	269
Emcor Rust Test, Distilled Water (IP 220)	1
ELECTICAL PROPERTIES	
Volume Resistivity ( $\rho_v$ ) (Mil-Std-883J Method 5.11.6)	114 $\Omega$ .cm
Volume Conductivity ( $\sigma_v$ ) (Mil-Std-883J Method 5.11.6)	0.009 S/cm

## FIRST AID & SAFETY PRECAUTIONS

Please refer to Safety Data Sheet (SDS) before use. Use with adequate ventilation and avoid breathing fumes. Avoid contact with eyes and skin. This product may produce adverse health conditions, ranging from minor skin irritation to serious systemic effects. It should not be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet (SDS) for this product have been fully understood by all persons who will work with the material.



### DISCLAIMER

Marine Protection Systems has made every effort to ensure the information provided in this Technical Data Sheet is accurate at the time of publication. Marine Protection Systems expressly recommends that the user make his/her own assessment to determine the suitability of the product for its intended purpose prior to application. MPS shall not be responsible for loss, damage, or injury, resulting from the reliance upon, or failure to adhere to, any recommendations or information contained herein; nor from abnormal use of the material; nor from any hazard inherent in the nature of the material.