

# 846 Technical Data Sheet

# **Carbon Conductive Grease**

#### Description

846 is an economical, carbon-filled, electrically conductive grease. It lubricates, reduces contact resistance, repels moisture, inhibits corrosion, and prevents static buildup.

Use 846 when you want a lubricating grease that provides great electrical contact and environmental protection. It is excellent for ground connections, rotating connections, rotary switches, variable capacitors, roller inductors, roller bearings, slip rings, slide connecters and potentiometers.

#### **Features and Benefits**

- Resistivity of 114 Ω·cm
- Improves electrical connections between irregular, pitted or corroded surfaces
- Ensures electrical contact between loose or vibrating parts
- Prevents arcing, pitting, hotspots and welds
- Reduces mechanical wear
- Inhibits corrosion
- Broad service temperature range of -50 to 200 °C (-58 to 392 °F)

#### **Usage Parameters**

Properties	Value
Shelf life	5 у

#### **Temperature Ranges**

Properties	Value
Constant service temperature	-50 to 200 °C [-58 to 392 °F]
Storage temperature limits <sup>a)</sup>	-40 to 40 °C [-40 to 104 °F]

a) Cold storage avoids material separation and settling. If storing at room temperature, mix thoroughly to disperse filler before use.



## **Properties**

Electrical Properties	Method	Value
Volume resistivity (ρ <sub>v</sub> )	Mil-Std-883J Method 5011.6	114 Ω·cm
Volume conductivity ( $\sigma_v$ )	Mil-Std-883J Method 5011.6	0.009 S/cm
Grease Properties	Method	Value
Evaporation loss, 22 h @165 °C [329 °F]	ASTM D 2595	2.6%
Oil separation, 30 h @165 °C [329 °F]	ASTM D 6184	0.4%
Dropping point	ASTM D 2265	>304 °C [>579 °F]
Water washout @38 °C [100 °F]	ASTM D 1264	1.3%
Worked penetration, 60 strokes, ½ scale	ASTM D 1403	269
Emcor rust test, distilled water	IP 220	1 a)
Physical Properties	Method	Value
Color	Visual	Black
Odor	—	Odorless
Density @25 °C [77 °F]	ASTM D 1475	1.05 g/mL
Viscosity @25 °C [77 °F]	IPCTM-65- Method 2.4.24.4	386 Pa·s <sup>b)</sup>
Lubricant	—	Yes
Bleed resistant	—	No
Corrosion resistant	—	Yes
VOC (Volatile Organic Compound)	—	0%

a) Not more than 3 rust spots visible to the naked eye.b) Brookfield viscometer at 10 rpm with spindle RV S95.



#### Storage

Store between -40 and 40 °C [40 and 104 °F] in dry area.

#### Health, Safety, and Environmental Awareness

Please see the 846 Safety Data Sheet (SDS) for further details on transportation, storage, handling, safety guidelines, and regulatory compliance.

#### **Application Instructions**

#### To apply the grease:

- 1. Wear protective gloves.
- 2. Clean and dry the surface being lubricated with a lint-free cloth or brush and a zero-residue cleaning solvent, such as MG 824 Isopropyl Alcohol.
- **3.** Apply a thin, even layer of grease using a spatula or other appropriate applicator.

#### Attention!

Carbon grease is messy and transfers easily. Be careful not to spread it beyond the intended area.

#### **Packaging and Supporting Products**

Cat. No.	Packaging	Net Volume	Net Weight	Packaged Weight
846-80G	Tube	76.2 mL [2.58 fl oz]	80 g [2.82 oz]	0.7 kg [1.5 lb]
846-1P	Jar	495 mL [1.04 pt]	520 g [1.14 lb]	0.55 kg [1.2 lb]
846-3.78L	Pail	3.78 L [3.99 pt]	3.97 kg [8.75 lb]	4.5 kg [9.92 lb]
846-18.9L	Pail	18.9 L [5 gal]	19.8 kg [43.7 lb]	21.4 kg [47.2 lb]

Contact M.G. Chemicals if custom packaging or sizes are required



### **Technical Support**

Please contact us regarding any questions, suggestions for improvements, or problems with this product. Application notes, instructions and FAQs are located at <u>www.mgchemicals.com</u>.

 Email:
 support@mgchemicals.com

 Phone:
 +(1) 800-340-0772 (Canada, Mexico & USA)

 +(1) 905-331-1396 (International)

 +(44) 1663 362888 (UK & Europe)

 Fax:
 +(1) 905-331-2862 or +(1) 800-340-0773

Mailing address:Manufacturing & Support1210 Corporate DriveBurlington, Ontario, CanadaL7L 5R6

**Head Office** 9347–193rd Street Surrey, British Columbia, Canada V4N 4E7

#### Disclaimer

This information is believed to be accurate. It is intended for professional end users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.