



Description

The 404B *Electronics Contact Cleaner with Silicone* is a very fast drying contact cleaner. It is a plastic-safe solvent cleaner that leaves a thin film of dry electronic grade silicone behind. The solvent system effectively dissolves oil and organic residues.

The silicone provides lubrication, preventing wear and tear, as well as a layer of protection from oxidation and the elements. As well, the dry lubrication makes it better for dusty environments than mineral oil alternatives.

Application

This product is useful in a variety of electronics applications such as contacts, connectors, jacks, switches, and battery terminals. It is also useful for lubricating delicate sliding metal parts, such as telescoping antennas.

Features and Benefits

- **Suitable for Use in Food Facilities as a Non-Food Chemical**—Canadian and NFS recognition letters available on request
- **Non-conductive**
- **Maximum service temperature of 200 °C (392 °F)**
- **Safe on many plastics**
- **Fast evaporation rate**
- **Protects from oxidation**
- **Reduces wear and abrasion**
- **A variable valve on the aerosol lets you adjust the flow rate as needed**
- **CARB and RoHS compliant**

Usage Parameters

<i>Properties</i>	<i>Value</i>
Shelf Life	5 y

Temperature Ranges

<i>Properties</i>	<i>Value</i>
Maximum Constant Service Temperature	200 °C [392 °F]
Storage Temperature Limits ^{a)}	-20 to 40 °C [-4 to 104 °F]

a) Storage below zero is not necessary. Cool, dry, and well ventilated area recommended.

Properties

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color Odor Density @25°C [77 °F] Viscosity @25°C [77 °F] Flash Point Boiling Point Vapor Pressure @25°C [77 °F] Relative Evaporation Rate Volatile Organic Content (VOC)	— Brookfield SP1 Closed Cup	Clear Mild hydrocarbon 0.66 g/mL 0.3 cP [0.0003 Pa·s] -29 °C [-20 °F] 52 °C [126 °F] 33 kPa [250 mmHg] 0.8 (Ether=1); 9.4 (ButAc=1) 75%
<i>Solvation Parameters</i>	<i>Value</i>	
Solubility in Water KB (Kauri Butanol) Value	Insoluble 30	
Hansen Solubility Parameters ^{a)}	(MPa) ^{1/2}	[cal/cm ³] ^{1/2}
Total	14.9	7.28
Non-Polar	14.9	7.28
Polar	0.0	0.0
Hydrogen Bonding	0.0	0.0

a) Hansen parameters calculate using component literature values and volume fraction composition.

Compatibility

Substrate Compatibility: Consult 404B partial compatibility chart table for substrate compatibility. It is always recommended to perform a compatibility test on a non-critical test area prior to large scale applications. Perform this test even if the chart predicts high compatibility since modern plastic parts may incorporated hidden incompatible materials in the form of plastic blends or as protective and decorative coatings.

Compatibility Chart

<i>Plastic type</i>	<i>Resistance</i>
Epoxy	Very Good
ABS (acrylonitrile butadiene styrene)	Poor
PMMA (Acrylic)	Good
PVC (Polyvinyl chloride)	Good
HD-PE (high density polyethylene)	Good
LD-PE (low density polyethylene)	Partial
PP (polypropylene)	Good
PS (polystyrene)	Partial
PC (Polycarbonate)	Poor

ATTENTION!

Use with care on thin plastics or near parts that are chemically sensitive.

Solvent Miscibility: The 404B is generally miscible organic solvent, but it is immiscible with water.

Health, Safety, and Environmental Awareness

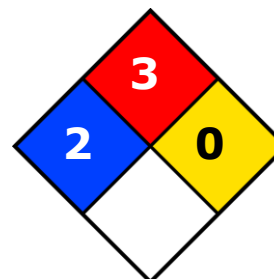
Please see the 404B **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

Health and Safety: This liquid is flammable and should be kept away from flames and other ignition sources. Avoid breathing in fumes or direct contact with the material.

HMIS® RATING

HEALTH:	*	2
FLAMMABILITY:		3
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Environmental Impact: It is RoHS and CARB compliant.

Application Instructions

To clean residues in aerosol format

1. Spray dirty area.
2. Ensure that wash runs off the circuit board along the shortest unencumbered path to prevent redeposit of solvated residues

Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>		<i>Packaging Weight</i>	
404B-140G	Aerosol	188 mL	6.35 fl oz	140 g	4.93 oz	2.2 kg ^{a)}	4.9 lb ^{a)}
404B-340G	Aerosol	457 mL	15.4 fl oz	340 g	11.9 oz	4.6 kg ^{a)}	10 lb ^{a)}

a) Case pack of ten

Supporting Products

- *Hog Hair Cleaning Brush:* Cat. No. 852
- *Large Hog Hair Cleaning Brush:* Cat. No. 853



ISO 9001 Registered Quality System.
Burlington, Ontario, Canada QMI File # 004008

Electronics Contact Cleaner with Silicone 404B Technical Data Sheet

404B-Aerosol

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

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

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

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

Mailing address: **Manufacturing & Support**
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

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

Warranty

M.G. Chemicals Ltd. warrants this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

Disclaimer

This information is believed to be accurate. It is intended for professional end users having the skills 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.