



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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New! 3M™ Novec™ Contact Cleaner/Lubricant

Introduction

New 3M™ Novec™ Contact Cleaner/Lubricant quickly penetrates and flushes away light oils and greases from sensitive electrical and electronic equipment including: avionics, electro-mechanical devices, electrical contacts, connectors and switches. Effectively removes fluorinated oils and greases. It also leaves a thin protective silicone coating. Novec Contact Cleaner/Lubricant is compatible with plastics and other materials of construction.

- Cleans and lubricates
- Non-flammable
- Excellent plastics compatibility
- Non conductive, non-corrosive
- Meets MIL-PRF 29608A (Class L)
- Low toxicity
- Low Global Warming Potential
- Contains no HCFCs, HFCs, nPB or HAPs

Plastics Compatibility

Material	Compatibility	Material	Compatibility
ABS	Excellent	PMMA	Excellent*
Nylon	Excellent	POM	Excellent
Lexan®/Polycarbonate	Excellent	PP	Excellent
HDPE	Excellent	PS	Excellent
CDPE	Excellent	PTFE	Excellent
C.E. Phenolic	Excellent	PVC	Excellent

* May damage stressed acrylics. Test before use.



3M™ Novec™ Contact Cleaner/Lubricant cleans sensitive electrical/electronic equipment and leaves a thin protective silicone coating.

Environmental, Health and Safety Information

Properties	Novec Contact Cleaner Plus/Lubricant	HCFC-141b	Previous MIL-PRF 29608
Ozone Depletion Potential ¹ (ODP)	0	0.1	0.10
Global Warming Potential ² (GWP)	71	725	5000
Flashpoint	None	None	None
Exposure Guideline (ppmV, 8 hr time weighted average)	200	500	500

¹CFC-11 = 1.0

²GWP-100 year integration time horizon, CO₂ = 1.0

Regulatory Information

RoHS/WEEE Compliant	Yes
NSF Registration	Not yet registered
Meets CA VOC Limits	Yes – Silicone-based multi-purpose lubricant
Meets OTC VOC Limits	Yes – Silicone-based multi-purpose lubricant
NSN (National Stock Number)	6850-01-597-1998

Qualifications and Approvals

MIL-PRF 29608A (Class L)	Performance specification – Electrical contact cleaning and lubricating compounds
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Physical Properties

Evaporation Rate (n-Butyl Acetate=1)	>1
Surface Tension (dynes/cm ²)	15.3
Specific Gravity (g/ml)	1.37
Dielectric Strength	>25kV
Shelf Life	1 year*

*Initial estimate; measurement is pending.

More 3M™ Novec™ Aerosol Cleaners

3M™ Novec™
Contact Cleaner

3M™ Novec™
Contact Cleaner Plus

3M™ Novec™
Electronic Degreaser

3M™ Novec™
Flux Remover

Safety and Handling

3M™ Novec™ Contact Cleaner/Lubricant is nonflammable. When used as directed, in its intended applications, The product has a wide margin of safety between anticipated exposures and the exposure guideline. Before using this product, be sure to read and follow all precautions and directions for use contained in the product label and Material Safety Data Sheet, which is available from your local 3M representative upon request.

Transportation Classification

Ground: Consumer Commodity ORM-D **Air:** Aerosols, Nonflammable, 2.2, UN1950

Resources

3M™ Novec™ Aerosol Cleaners are supported by global sales, technical and customer service resources, with fully-staffed technical service laboratories in the U.S., Europe, Japan, Latin America and Southeast Asia. Users benefit from 3M's broad technology base and continuing attention to product development, performance, safety and environmental issues.

For additional technical information on Novec Contact Cleaner/Lubricant in the United States, call 3M Customer Service, 800 810 8513.

For information on additional 3M fluids, coatings and other chemical products for the electronics industry, visit our web site at: www.3M.com/novec

The 3M™ Novec™ Brand Family

The Novec brand is the hallmark for a variety of patented 3M products. Although each has its own unique formula and performance properties, all Novec products are designed in common to address the need for safe, effective, sustainable solutions in industry-specific applications. These include precision and electronics cleaning, heat transfer, fire protection, lubricant deposition and several specialty chemical applications.

3M™ Novec™ Engineered Fluids • 3M™ Novec™ Aerosol Cleaners • 3M™ Novec™ 1230 Fire Protection Fluid • 3M™ Novec™ Electronic Coatings • 3M™ Novec™ Electronic Surfactants

United States	China	Europe	Japan	Korea	Singapore	Taiwan
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