# New! 3M™ Novec™ Contact Cleaner/Lubricant

#### Introduction

New 3M<sup>™</sup> Novec<sup>™</sup> 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

<sup>\*</sup> May damage stressed acrylics. Test before use.

# **Environmental, Health and Safety Information**

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

## **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



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



 $<sup>{}^{2}</sup>GWP$ -100 year integration time horizon,  $CO_{2} = 1.0$ 

#### **Physical Properties**

Evaporation Rate (n-Butyl Acetate=1)	>1
Surface Tension (dynes/cm²)	15.3
Specific Gravity (g/ml)	1.37
Dielectric Strength	>25kV
Shelf Life	1 year*

<sup>\*</sup>Initial estimate; measurement is pending.

#### More 3M<sup>™</sup> Novec Aerosol Cleaners

3M<sup>™</sup> Novec<sup>™</sup> Contact Cleaner

3M<sup>™</sup> Novec<sup>™</sup> Contact Cleaner Plus

3M<sup>™</sup> Novec<sup>™</sup> Electronic Degreaser

3M<sup>™</sup> Novec<sup>™</sup> Flux Remover

#### Safety and Handling

3M<sup>™</sup> Novec<sup>™</sup> 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<sup>™</sup> Novec<sup>™</sup> 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
3M Electronics Markets	3M China Ltd.	3M Belgium N.V.	Sumitomo 3M Limited	3M Korea Limited	3M Singapore Pte. Ltd.	3M Taiwan Limited
Materials Division	86 21 6275 3535	32 3 250 7521	813 3709 8250	82 2 3771 4114	65 454 8611	886 2 2704 9011
800 810 8513						

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Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

#### Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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