



# Novec™

Brand

## 3M™ Novec™ Contact Cleaner Plus

### Introduction

3M™ Novec™ Contact Cleaner Plus is formulated with extra cleaning power to remove stubborn oils, greases and silicones, as well as fluorinated oils and greases, dust and particulates, from sensitive electrical and electronic equipment. This includes connectors, printed circuit boards, electromechanical devices, scales, relays and circuit breakers. It is compatible with plastics and other materials of construction. Novec Contact Cleaner Plus is nonflammable, non ozone-depleting, has low global warming potential and contains no HCFCs, HFCs, nPB or HAPs. This product is formulated with 3M™ Novec™ 7200 Engineered Fluid, which is VOC-exempt under California Air Resources Board (CARB) regulations. Novec Contact Cleaner Plus is optimized for both compliance with the CARB VOC limits and high performance because it does not resort to increased use of inert propellants (dilution) in order to achieve compliance.

### Plastics compatibility

Material	Compatibility	Material	Compatibility
ABS	Excellent	PMMA	Excellent*
Nylon	Excellent	POM	Excellent
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.

### Environmental, health and safety information

Not for specification purposes. Please see the safety data sheet (SDS) for more information.

Properties	3M™ Novec™ Contact Cleaner Plus
Ozone Depletion Potential <sup>1</sup> (ODP)	None
Global Warming Potential <sup>2</sup> (GWP)	106
Atmospheric Lifetime-ALT (years)	3.8
Flashpoint <sup>3</sup>	None
Exposure Guideline (ppmV, 8 hour time weighted average)	200 <sup>4</sup>

<sup>1</sup> CFC-11 = 1.0

<sup>2</sup> GWP-100 year integration time horizon, CO<sub>2</sub> = 1.0

<sup>3</sup> Test of the bulk fluid mixture per ASTM D3278

<sup>4</sup> 3M™ Novec™ Contact Cleaner Plus aerosol is comprised of three components. The values shown are for each component:  
3M™ Novec™ 7100 Engineered Fluid / 3M™ Novec™ 7200 Engineered Fluid / trans-1, 2-dichloroethylene

## Key features and benefits

- Fast drying, low odor
- Excellent plastics compatibility
- No rinsing and no residues
- Non-corrosive, non-conductive
- Non-flammable
- Low toxicity
- Low global warming potential

## Regulatory information

RoHS/WEEE Compliant	Yes
NSF Registration	Nonfood Compound Program Listed K2 Reg#141393
Meets CARB VOC Limits	Yes - Electrical Cleaner
Meets OTC VOC Limits	Yes - Electrical Cleaner
NSN (National Stock Number)	6850-01-597-1949

## Physical properties

Not for specification purposes.

Properties	Values
Surface Tension (dynes/cm <sup>2</sup> )	16
Specific Gravity (g/mL)	1.40
Dielectric Strength	>25 kV
Shelf Life	5 years*

\* The shelf life of 3M™ Novec™ Contact Cleaner Plus is 5 years from the date of manufacture when stored at general warehouse storage conditions, less than 27°C (80°F).

## Safety and handling

3M™ Novec™ Contact Cleaner Plus 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 Safety Data Sheet, which is available from your local 3M representative upon request. This product is for industrial use only. Not for consumer use or sale.

## Transportation classification

**Ground:** Consumer Commodity ORM-D

**Air:** Aerosols, Nonflammable, 2.2, UN1950

## Resources

For more information on 3M Novec products or to contact a 3M representative, visit [3M.com/Novec](http://3M.com/Novec).

**Smart. Safe. Sustainable.**

---

## The 3M™ Novec™ Brand Family

The Novec brand is the hallmark for a variety of proprietary 3M products. Although each has its own unique formula and performance properties, all Novec products are designed in common to address the need for smart, safe and sustainable solutions in industry-specific applications. These include precision and electronics cleaning, heat transfer, fire protection, protective coatings, immersion cooling, advanced insulation media replacement solutions and several specialty chemical applications.

---

3M™ Novec™ Engineered Fluids • 3M™ Novec™ Aerosol Cleaners • 3M™ Novec™ 1230 Fire Protection Fluid • 3M™ Novec™ Electronic Grade Coatings • 3M™ Novec™ Insulating Gases

---

**Safety Data Sheet:** Consult Safety Data Sheet before use.

**Regulatory:** For regulatory information about this product, contact your 3M representative.

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

**Product Use:** Many factors beyond 3M's control and uniquely within user's control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

**Warranty, Limited Remedy, and Disclaimer:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OR TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

**Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



### Electronics Materials Solutions Division

3M Center, Building 224-3N-11  
St. Paul, MN 55144-1000 USA

Web [www.3M.com/novec](http://www.3M.com/novec)  
Phone 1-800-810-8513

Please recycle. Printed in USA.  
©3M 2019. All rights reserved.  
Issued: 11/19 15177HB  
60-5002-0348-8

3M and Novec are trademarks of 3M Company.  
Used under license by 3M subsidiaries and affiliates.