

[Product Catalog for Electronic Specialty Markets](#) > [3M™ Adhesives, Cleaners & Compounds](#) > [Cleaners](#) > [3M™ Aerosol Cleaners](#) >

3M™ Novec™ Flux Remover, 12 oz can, 6 per case



3M™ Novec™ Flux Remover effectively removes rosin solder fluxes, waxes and similar contaminants found in electronics manufacturing and repair. Based on proprietary 3M solvent technology; it is non-flammable, non-ozone depleting, and contains no HCFCs, HFCs, nPB or HAPs.

[\[click to enlarge\]](#)

GTIN(UPC/EAN) : 0 00 51135 71697 7
3M Id : 98-0212-3291-7

Characteristics

EU RoHS Compliant	Yes
-------------------	-----

[Product Catalog for Electronic Specialty Markets](#) > [3M™ Adhesives, Cleaners & Compounds](#) > [Cleaners](#) > [3M™ Aerosol Cleaners](#) > [3M™ Novec™ Flux Remover, 12 oz can, 6 per case](#)

3M™ Novec™ Flux Remover, 12 oz can, 6 per case

Additional Information

3M™ Novec™ Flux Remover removes rosin solder fluxes, waxes and similar contaminants found in electronics manufacturing and repair. It is also effective in removing hydrocarbon, silicone and fluorochemical oils and greases encountered in the maintenance of electronic devices such as electric motors, generators, precision devices and other electro-mechanical or sensitive equipment. Novec Flux Remover evaporates quickly, and leaves little or no residue. This industrial strength cleaner is non-corrosive and compatible with most plastics with the exception of acrylics, polycarbonates, ABS and PS. Based on proprietary 3M solvent technology, it is non-flammable, non-ozone depleting and contains no HCFCs, HFC, nPB or HAPs.

[Product Catalog for Electronic Specialty Markets](#) > [3M™ Adhesives, Cleaners & Compounds](#) > [Cleaners](#) > [3M™ Aerosol Cleaners](#) > [3M™ Novec™ Flux Remover, 12 oz can, 6 per case](#)

3M™ Novec™ Flux Remover, 12 oz can, 6 per case

Packaging

3M Id: 98-0212-3291-7

Minimum Order Quantity: 6.0 CAN

Case Quantity: 6.0 CAN

	English	Metric
Length	8.7 INCH	0.221 MTR
Width	5.8 INCH	0.148 MTR
Height	8.9 INCH	0.226 MTR
Gross Weight	11.9870 LBS	5.4372 KG

Introduction

3M™ Novec™ Flux Remover uses advanced 3M solvent technology to remove rosin solder fluxes, waxes and similar contaminants found in electronics manufacturing and repair. It is also effective in removing hydrocarbon, silicone and fluorochemical oils and greases encountered in the maintenance of electronic devices such as electric motors, generators, precision devices and other electromechanical or sensitive equipment. Novec Flux Remover evaporates quickly, and leaves no residue. It is non-corrosive and compatible with most plastics, with the exception of acrylics, polycarbonates, ABS and PS.

Novec Flux Remover is based on a non-flammable, high performance proprietary hydrofluoroether formulation that is non-ozone depleting and does not contain any Hydrochlorofluorocarbons (HCFCs), Hydrofluorocarbons (HFCs), Hazardous Air Pollutants (HAPs) or n-propyl bromide (nPB). This results in an affordable, industrial-strength flux remover, providing a wide margin of workplace safety and a favorable environmental profile.

Features

- Non-flammable
- Fast drying, very low residue
- Low odor
- Non-corrosive
- Non-ozone depleting (No HCFCs)
- Low toxicity (No nPB or HAPs)

Novec Flux Remover can be an effective substitute for many cleaners based on ozone depleting substances such as HCFC-141b, HCFC-225, or nPB. It also offers a greater margin of safety than many nPB-based cleaners or cleaners containing HAPs, such as perchloroethylene. Carbon dioxide is used as the propellant rather than a flammable hydrocarbon or an HFC greenhouse gas.

Environmental, Health and Safety Information

Properties	Novec Flux Remover	HCFC-141b	HCFC-225 ca	nPB	Perchloroethylene
Ozone Depletion Potential - ODP ¹	0.0	0.1	0.03	0.013-0.1	0.0
Global Warming Potential - GWP ²	41	700	180	Low	Low
Hazardous Air Pollutant ³	No	No	No	No	Yes
Exposure Guidelines (ppmV, TWA)	200	500	50	10	25
Margin of Safety ⁴ (MOS)	10	25	2.5	0.5	1.2

¹CFC-11 = 1.0

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

³As defined by the U.S. EPA in the Clean Air Act of 1990

⁴MOS in use = $\frac{\text{Exposure Guideline}}{\text{Assumed 20 ppmV 8hr TWA exposure}}$



Material Safety Data Sheet

Copyright, 2006, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™Novec™ Flux Remover
MANUFACTURER: 3M
DIVISION: Electronics Markets Materials Division

ADDRESS: 3M Center
 St. Paul, MN 55144-1000

Issue Date: 01/06/2006
Supersedes Date: 12/13/2005

Document Group: 20-0407-5

Product Use:

Specific Use: Flux Remover

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
1,2-TRANS-DICHLOROETHYLENE	156-60-5	65 - 72
ETHYL NONAFLUOROISOBUTYL ETHER	163702-06-5	6 - 16
ETHYL NONAFLUOROBUTYL ETHER	163702-05-4	4 - 14
METHYL NONAFLUOROISOBUTYL ETHER	163702-08-7	3 - 8
METHYL NONAFLUOROBUTYL ETHER	163702-07-6	2 - 7
ISOPROPYL ALCOHOL	67-63-0	1 - 5
CARBON DIOXIDE	124-38-9	1 - 5

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Aerosol

Odor, Color, Grade: Clear, Colorless Liquid with Slight Odor, Contents Under Pressure

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains gas under pressure. May cause target organ effects.

3.2 POTENTIAL HEALTH EFFECTS

Exposures resulting from intentional misuse and abuse may cause an increase in myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	408 °C
Flash Point	<i>None acc to ASTM methods D92 (open cup) and D56 (closed cup)</i>
Flammable Limits - LEL	5.9 % volume
Flammable Limits - UEL	14.5 % volume

5.2 EXTINGUISHING MEDIA

Non-combustible. Choose material suitable for surrounding fire.

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Exposure to extreme heat can give rise to thermal decomposition. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Closed containers exposed to heat from fire may build pressure and explode. Aerosol container contains gas under pressure.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available. Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

For industrial or professional use only. Avoid breathing of vapors, mists or spray. Avoid skin contact. Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not breathe thermal decomposition products. No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of the hazardous decomposition products mentioned in the Reactivity Data section of this MSDS. Store work clothes separately from other clothing, food and tobacco products. Do not pierce or burn container, even after use. Do not spray near flames or sources of ignition. Avoid contact with oxidizing agents. Use general dilution ventilation and/or local exhaust ventilation to

ETHER

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Aerosol
Odor, Color, Grade:	Clear, Colorless Liquid with Slight Odor, Contents Under Pressure
General Physical Form:	Liquid
Autoignition temperature	408 °C
Flash Point	<i>None acc to ASTM methods D92 (open cup) and D56 (closed cup)</i>
Flammable Limits - LEL	5.9 % volume
Flammable Limits - UEL	14.5 % volume
Boiling point	44 °C
Density	1.3 g/ml
Vapor Density	2.3 [<i>@ 25 °C</i>] [<i>Ref Std: AIR=1</i>]
Vapor Pressure	360 mmHg [<i>@ 25 °C</i>] [<i>Details: Internal Pressure for Aerosol Can is approximately 75 psig @25C</i>]
Specific Gravity	1.3 [<i>Ref Std: WATER=1</i>]
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Solubility in Water	Slight (less than 10%)
Evaporation rate	<i>No Data Available</i>
Volatile Organic Compounds	67 % [<i>Details: by weight</i>]
Percent volatile	100 %
VOC Less H₂O & Exempt Solvents	67 % [<i>Details: by weight</i>]
Viscosity	0.4 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.**Materials and Conditions to Avoid:** Strong bases; Strong oxidizing agents; Heat**Hazardous Polymerization:** Hazardous polymerization will not occur.**Hazardous Decomposition or By-Products**

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Chloride	At Elevated Temperatures - extreme conditions of heat