



## INFO SHEET

Solutions to make a smooth transition from phased-out 3M™ products

3M has recently announced to discontinue all Novec™ PFAS-based products by the end of 2025.

Should this worry users of those products for cleaning, coating and cooling applications?

**No need to worry...  
but act with a sense of urgency**

Inventec has been for over 25 years a reliable partner of 3M™ in supplying their cleaning solvents together with our own formulations to a worldwide customer base. We understand very well the technicalities of these fluids and the processes in which they are used. This makes Inventec well placed to find the right alternative for you.

In this document we outline your options for a transition from 3M™ products for cleaning, coating and cooling applications. At the end of the document we provide you also the official announcement letter from 3M™ and the list of affected products.

## PUT YOUR THRUST AT INVENTEC

Over 60 years experience in solvent and aqueous cleaning solutions

Global presence with Production, Sales and Technical specialist

Close follow up on regulations and anticipating ahead

SOLDERING • CLEANING • COATING • COOLING

[www.inventec.dehon.com](http://www.inventec.dehon.com)

# Cleaning





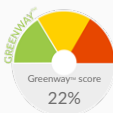
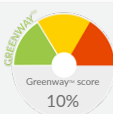
## PROMOSOLV™

### SOLVENT CLEANING & DRYING RANGE

Solvent based cleaning fluids for vapor phase cleaning process or used as rinsing agent in co-solvent systems. Also products for spotless solvent drying process.

## DROP-IN PROMOSOLV™ SOLUTIONS

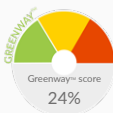
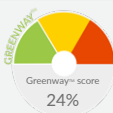
Our PROMOSOLV range covers most mono-solvent (vapor phase cleaning) & co-solvent cleaning applications and don't rely on 3M™ chemistries. These act as a **DROP-IN REPLACEMENT** and **MINIMIZE QUALIFICATION EFFORTS**. In fact, due to supply issues with certain 3M™ products in the past 2 years, many customers have already successfully transferred to PROMOSOLV products without any issues.

|   |   |   |
|---|---|---|
| <b>PROMOSOLV™ 70</b><br>Degreasing, wax & polymer removal             |    | <ul style="list-style-type: none"><li>• High cleaning power for a wide range of contaminants</li><li>• Vapor phase process</li><li>• High cleaning power &amp; no flash point</li></ul>   |
| <b>PROMOSOLV™ 70ES</b><br>Flux residue removal                        |    | <ul style="list-style-type: none"><li>• High cleaning power for various flux formulations</li><li>• Vapor phase process</li><li>• No flash point</li></ul>  |
| <b>PROMOSOLV™ DR1</b><br>Rinsing & drying for electronic applications |   | <ul style="list-style-type: none"><li>• Very low surface tension: efficient rinsing under low stand-off components</li><li>• Co-solvent process</li><li>• Non-flammable and no flash point</li></ul>                              |
| <b>PROMOSOLV™ DR3</b><br>Particle removal, rinsing & drying           |  | <ul style="list-style-type: none"><li>• Very low surface tension: efficient rinsing of parts with complex geometries</li><li>• Co-solvent &amp; spotless fast drying process</li><li>• Non-flammable and no flash point</li></ul> |

Non-exhaustive list of products. Let INVENTEC assist you to customize the best product adapted to your need.

## PROMOSOLV NEO: THE FUTURE IN SOLVENT CLEANING

In 2022 we launched our **PROMOSOLV NEO** range to offer sustainable solvent solutions for a greener future. This range represents solvents with **NO** to **ULTRA-LOW GWP** and are **PFAS FREE**. This range is still in full expansion but ready to order solutions for mono-solvent (vapor phase cleaning) and co-solvent degreasing applications are available. More products will be released in 2023, especially for electronic cleaning applications.

|   |   |  |
|---|---|--|
| <b>PROMOSOLV™ NEO A1</b><br>Light degreasing, rinsing & drying<br><b>GREENWAY NEW</b> |  | <ul style="list-style-type: none"><li>• Very low surface tension: efficient for parts with complex geometries</li><li>• Co-solvent, vapor phase &amp; spotless drying process</li><li>• Non-flammable, no flash point &amp; no GWP</li></ul> |
| <b>PROMOSOLV™ NEO B1</b><br>Degreasing, wax & polymer removal<br><b>GREENWAY NEW</b>  |  | <ul style="list-style-type: none"><li>• High cleaning power for a wide range of contaminants</li><li>• Vapor phase process</li><li>• Non-flammable, no flash point &amp; no GWP</li></ul>  |

Non-exhaustive list of products. Let INVENTEC assist you to customize the best product adapted to your need.

# Cleaning

## AQUEOUS OR VACUUM CLEANING ALTERNATIVES



### **PROMOCLEAN™**

#### *DETERGENT CLEANING RANGE*

Cleaning fluids for water-based immersion or spray processes.



### **TOPKLEAN™**

#### *HYDROCARBON CLEANING RANGE*

Cleaning fluids dedicated for co-solvent system or as a single solvent in vacuum cleaning process.

In case you want to investigate other cleaning processes, INVENTEC also covers aqueous and vacuum cleaning solutions. With multiple products in our range we cater solutions for degreasing, dewaxing, soil & particle removal and defluxing.

CLICK ON THE LINK TO FIND OUT MORE: [www.inventec.dehon.com](http://www.inventec.dehon.com)

# Coating



### **PROMOSOLV™ COAT**

#### *ULTRA-THIN COATING RANGE*

Ultra-thin coating range developed to protect electronics or other substrates with an easy, fast & environmental friendly process.

INVENTEC has its own line of ultra-thin coatings also known as Electronic Grade Coatings. Our PROMOSOLV COAT UT10 comes in different solid contents and with or without UV tracer.

CLICK ON THE LINK TO FIND OUT MORE: [www.inventec.dehon.com](http://www.inventec.dehon.com)

# Dielectric cooling fluids



### **THERMASOLV™**

#### *DIELECTRIC COOLING FLUIDS RANGE*

Dielectric cooling fluids for electronic and electrical devices.

INVENTEC also has a range of dielectric cooling fluids under the brand name THERMASOLV™. These products are dedicated for immersion cooling, direct cooling or dielectric testing.

CLICK ON THE LINK TO FIND OUT MORE: [www.inventec.dehon.com](http://www.inventec.dehon.com)

# Good to know...

- The faster you react to qualify on an alternative product, the better we are in a position to guarantee a smooth transition and supply.
- Inventec has a worldwide sales and technical support team who are ready to support you in the implementation of our products. This is even of a greater added value when you have processes set up in different facilities around the world. We are there at every step along the way.
  - to select the right product **based on your specific needs**,
  - to assist you in your **product qualification process**,
  - to guide you with the initial **set up of you process** at all your worldwide manufacturing facilities,
  - to provide **fast response on technical issues** which could occur at any time during mass production.
- The PFAS and PFOS regulation is still under development in different parts of the world and it is uncertain how it will impact currently used cleaners based on Hydrofluorethers (HFE). Also there is no timeline set if there would be a ban on certain chemistries or on certain applications. Inventec follows up closely all regulations around the world and is knows to anticipate well in advance on changes in regulation. Being 60 years in the market we have adapted successfully multiple times to changes in regulation. So this is not new to us and we know how to plan and execute these kind of transitions. Our Promosolv NEO range is proof of adapting our product portfolio ahead of regulations.
- As a preferred partner of 3M™, INVENTEC will still receive NOVEC™ products until end 2025. Although to be noted that it is not guaranteed how many product still can be produced and supplied in the next 2 years.

## How to contact us?

The best way to start your transition, is to contact us via our local representation or via the following email: [contact@inventec.dehon.com](mailto:contact@inventec.dehon.com) . In this way we can asses your needs and recommend you the best alternative option.

## INVENTEC WORLDWIDE

6  
PRODUCTION SITES

10  
SUBSIDIARIES

WORLDWIDE  
DISTRIBUTOR  
NETWORK



## OUR OFFICES

### EUROPE

#### **INVENTEC Performance Chemicals**

*Head Quarter, Sales office and production facility*

26 rue des Coulons – BP 27  
94363 Bry-sur-Marne cedex / France  
Tel: +33 1 43 98 75 00  
Email: info\_france@inventec.dehon.com

#### **INVENTEC Switzerland**

*Production site & Sales office*

Z.I, Petits Champs 15  
1400 Yverdon-les-Bains  
Tel: +41(0) 24 424 80 90  
Email: info.ch@inventec.dehon.com

#### **INVENTEC Germany**

*Sales office*

Robert-Bosch-Strasse 14  
D-40668 Meerbusch  
Tel: +33 (0)6 11 95 98 86  
Email: info\_germany@inventec.dehon.com

#### **INVENTEC Spain**

*Sales office*

Polígono Industrial Sepes, C/ Kepler 10,  
E-46520 Puerto de Sagunto, Valencia  
Tel: +(34) 96 353 51 93  
Email: infospain@inventec.dehon.com

#### **INVENTEC Hungary**

*Sales office*

Gábor Dénes körút 580. (BITEP Ipari Park)  
H-2040 Budaörs  
Tel: +(36) 23 431 660 / 661  
Email: inventec.hu@inventec.dehon.com

### ASIA

#### **INVENTEC China**

*Production site & Sales office*

1/2 F Building 6, No. 185 yuanke Rd.  
Xinzhuang Industry Park 201108 Shanghai  
Tel: +(86) 21 6442 3962/82  
Email: infochina@inventec.dehon.com

#### **INVENTEC South East Asia**

*Production site & Sales office*

No. 3, Jalan Industri Kidamai 2/1, Taman Industri Kidamai 2  
43000 Kajang, Selangor, Malaysia  
Tel: +(60) 3 8741 8925  
Email: infosea@inventec.dehon.com

### AMERICA

#### **INVENTEC USA**

*Production site & Sales office*

500 Main Street, Suite 18, PO Box 989  
Deep River, CT 06417 USA  
Tel: +(1) 860 526 8300  
Email: info\_northamerica@inventec.dehon.com

#### **INVENTEC Mexico**

*Production site & Sales office*

Rio Conchos 1757, Fraccionamiento Industrial El Rosario  
Guadalajara, Jalisco C.P. 44890, Mexico  
Tel: +(52) 33 3838 8866  
info\_southamerica@inventec.dehon.com



[www.inventec.dehon.com](http://www.inventec.dehon.com) • [contact@inventec.dehon.com](mailto:contact@inventec.dehon.com)

# ANNEX

## OFFICIAL LETTER 3M™

3M Electronics Materials Solutions Division

3M Center, Building 223-3S-32  
St. Paul, MN, USA 55144-1000



December 20, 2022

Dear Valued Customer,

3M today announced it plans to exit per- and polyfluoroalkyl substance (PFAS) manufacturing and work to discontinue use of PFAS in its product portfolio by the end of 2025. This portfolio decision is based on careful consideration and a thorough evaluation of the external landscape, including multiple factors such as accelerating regulatory trends focused on reducing or eliminating the presence of PFAS in the environment and changing stakeholder expectations.

This impacts products/product families you purchase from 3M listed in Appendix 1. Unfortunately, supply of most of these products continues to be impacted by global supply challenges and strong industry demand exceeding current capacity. Some of the products are also impacted by ongoing force majeure events. We will continue to take all reasonable steps to avoid supply disruptions, but we anticipate that our ability to supply will continue to be constrained.

3M will continue to fulfill contractual obligations during the transition period. Please note that regardless of any order acknowledgement, 3M may not be able to supply your orders due to continuing force majeure events and supply constraints, and we strongly urge customers to find alternative sources of supply.

3M will manage customer last time buy requests based on availability of supply, and we will work with customers to determine specific needs and put in place an action plan to help ensure an orderly transition. 3M does not currently anticipate stockpiling these products.

We understand you may have questions concerning this announcement. Please contact your 3M sales representative, who will work with you to the best of their ability to help support.

Sincerely,

A handwritten signature in blue ink that reads "David N. Schneider".

David N. Schneider  
Vice President, Chemicals and Semiconductor  
3M Company, Electronics Materials Solutions Division



### Appendix 1 List of Impacted Products

| Product Trade Name                        |
|---|
| 3M™ Electronic Surfactant 4200            |
| 3M™ Electronic Surfactant 4300            |
| 3M™ FA-188 Foam Additive                  |
| 3M™ FC-5000 Ionic Liquid Antistat         |
| 3M™ Fluorad™ Battery Electrolyte HQ-115   |
| 3M™ Fluorinert™ Electronic Liquid FC-40   |
| 3M™ Fluorinert™ Electronic Liquid FC-149  |
| 3M™ Fluorinert™ Electronic Liquid FC-3243 |
| 3M™ Fluorinert™ Electronic Liquid FC-3283 |
| 3M™ Fluorinert™ Electronic Liquid FC-3284 |
| 3M™ Fluorinert™ Electronic Liquid FC-43   |
| 3M™ Fluorinert™ Electronic Liquid FC-770  |
| 3M™ Fluorinert™ FC-72 Electronic Liquid   |
| 3M™ Ionic Liquid Antistat FC-4400         |
| 3M™ Novec™ 1230 Fire Protection Fluid     |
| 3M™ Novec™ Contact Cleaner                |
| 3M™ Novec™ 1700 Electronic Grade Coating  |
| 3M™ Novec™ 1702 Electronic Grade Coating  |
| 3M™ Novec™ 1720 Electronic Grade Coating  |
| 3M™ Novec™ 1902 Electronic Grade Coating  |
| 3M™ Novec™ 1904 Electronic Grade Coating  |
| 3M™ Novec™ 1908 Electronic Grade Coating  |
| 3M™ Novec™ 2202 Electronic Grade Coating  |
| 3M™ Novec™ 2701 Electronic Grade Coating  |
| 3M™ Novec™ 2704 Electronic Grade Coating  |
| 3M™ Novec™ 2708 Electronic Grade Coating  |
| 3M™ Novec™ 4710 Insulating Gas            |
| 3M™ Novec™ 5110 Insulating Gas            |
| 3M™ Novec™ 612 Magnesium Protection Fluid |

| Product Trade Name                               |
|--|
| 3M™ Novec™ 649 Engineered Fluid                  |
| 3M™ Novec™ 7000 Engineered Fluid                 |
| 3M™ Novec™ 7100 Engineered Fluid                 |
| 3M™ Novec™ 7100DL Engineered Fluid               |
| 3M™ Novec™ 71DA Engineered Fluid                 |
| 3M™ Novec™ 71DE Engineered Fluid                 |
| 3M™ Novec™ 71IPA DL Engineered Fluid             |
| 3M™ Novec™ 71IPA Engineered Fluid                |
| 3M™ Novec™ 7200 Engineered Fluid                 |
| 3M™ Novec™ 7200DL Engineered Fluid               |
| 3M™ Novec™ 72DA Engineered Fluid                 |
| 3M™ Novec™ 72DE Engineered Fluid                 |
| 3M™ Novec™ 7300 Engineered Fluid                 |
| 3M™ Novec™ 73DE Engineered Fluid                 |
| 3M™ Novec™ 7500 Engineered Fluid                 |
| 3M™ Novec™ 7500C Engineered Fluid                |
| 3M™ Novec™ 7700 Engineered Fluid                 |
| 3M™ Novec™ 8200 Engineered Fluid                 |
| 3M™ Novec™ Contact Cleaner / Lubricant           |
| 3M™ Novec™ Contact Cleaner Plus                  |
| 3M™ Novec™ Electronic Degreaser                  |
| 3M™ Novec™ Engineered Fluid 71D90                |
| 3M™ Novec™ Engineered Fluid 72FL                 |
| 3M™ Novec™ Flux Remover                          |
| 3M™ Novec™ MW-2410 Engineered Metalworking Fluid |
| 3M™ PF-5052 Performance Fluid                    |
| 3M™ PF-5056 Performance Fluid                    |
| 3M™ PF-5058 Performance Fluid                    |
| 3M™ PF-5060 Performance Fluid                    |