



3M

Novec[™]

Brand



**3M[™] Novec[™]
Engineered Fluids**

for coating, cleaning
and lubricant formulations

All the performance. No compromise.

3M Science. Applied to Life.[™]

3M™ Novec™ Engineered Fluids for coating, cleaning and lubricant formulations

No trade-offs. Just results.

To formulate quality products, you need solvents that set a new standard of performance.

When creating new coatings, cleaners and lubricants, you're always looking for new ways to push performance higher so your customers see better results. This is where your choice of solvent makes a big difference—the performance and quality of the fluid you choose can significantly impact the quality of your final product.

At 3M, we understand it can sometimes be a challenge to find a balanced solution for your formulations. You may think you have to sacrifice safety, sustainability or both for high performance. But with 3M™ Novec™ Engineered Fluids, a proprietary family of safe and sustainable solvents, there is no compromise.

Novec fluids offer an outstanding combination of performance, safety and environmental properties, allowing you to provide your customers with unique new solutions that get the job done. And with their excellent materials compatibility, you'll have the formulating freedom you need to create the perfect mix.



A versatile, sustainable solution

The unique properties of Novec fluids provide a balanced, cost-effective solution for your toughest formulation and performance challenges:

- Low global warming potential (GWP)
- Zero ozone depletion potential
- Not scheduled for regulatory restriction or phase-out
- Neat Novec fluids are non-chlorinated and exempt from the U.S. EPA definitions for Volatile Organic Compounds (VOCs)
- Non-flammable
- Non-conductive
- Excellent materials compatibility
- Non-corrosive
- Low toxicity
- High margin of worker safety
- Sustainable alternative to hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs) and other common industrial solvents

Solutions powered by science

3M™ Novec™ Engineered Fluids are based on a proprietary 3M chemistry. The invention of this unique, low-global warming potential chemistry is part of 3M's longstanding commitment to continually improve the environmental, health and safety profiles of our chemical products. The physical properties of these materials also make them an ideal solution for delivering value in many of today's most demanding solvent and lubricant applications:

- **Coatings**
 - Touch screens
 - Protection of electronic components
- **Precision cleaners**
- **Lubricants**
 - Fluorinated lubricants, including dry lubricants
 - Silicones
 - Hydrocarbon lubricants



Meeting your formulating challenges

With Novec fluids, neat and blends, there's no need to settle for only a few of the properties you want—you can have it all.

Engineered for:	To give you:
 Solubility	Freedom to formulate with a wide range of materials including hydrocarbons and fluorocarbons
 Stability	Consistent performance and reduced chance of formulation property changes due to storage or transport
 Compatibility	Compatible with metals, ceramics and most plastics and elastomers
 Low surface tension and viscosity	Improved wetting and sprayability for more uniform application and coverage
 Wide selection of boiling points	Better control over dry times and dripping
 Inerting	May help inert flammable fluids to help improve safety for workers and customers
 Versatility	Improved balance of performance, materials compatibility, safety and environmental properties to help increase value for customers

Engineered for long-term regulatory compliance

Novec fluids are not targeted for regulatory phasedown, unlike conventional solvents such as hydrochlorofluorocarbons (such as HCFC-225) and hydrofluorocarbons (HFCs like Vertrel™ XF specialty fluid from Chemours). Novec fluids are also a safer alternative to n-propyl bromide (nPB) and trichloroethylene (TCE) because of their wide margin of safety.



Let's get started—together

Not sure which Novec fluid is right for your particular application? We are here to help! Please use the contact information below to learn more and get started today. Or visit [3M.com/Novec](https://www.3M.com/Novec) for product specific information.

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 safe, effective, 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™ Electronic Surfactants • 3M™ Novec™ Dielectric Fluids

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

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