Clean without compromise.

3M™ Novec™ Engineered Fluids for solvent cleaning and vapor degreasing

Don’t settle.

Everything you need in a cleaning solvent – without the usual trade-offs.

In today’s fast-changing regulatory and competitive landscape, it can be challenging to find a cleaning solvent with the right mix of properties, compatibility and cleaning strength for your application’s needs. The ideal solution not only offers powerful cleaning performance but also delivers low environmental impact and a high margin of safety.

You may think you have to settle for a solvent that satisfies one of these needs at the expense of others, but with 3M™ Novec™ Engineered Fluids, you can have it all. These unique solvents have outstanding performance, environmental and safety properties, giving you excellent performance without compromise.

What’s more, Novec fluids offer a cost-effective solution for your toughest cleaning challenges. Our fluids are best used in traditional vapor degreasing systems that provide fast cycle times and continuous recycling of the fluid. They are also effective in immersion systems and hand wiping applications. Either way, Novec fluids clean without damaging sensitive components or leaving residue on your parts. And no matter your application, we’re here to help you get the most from our solutions with time-tested knowledge and support.

The science of clean

Novec fluids are based on proprietary 3M™ chemistry. This sustainable technology is part of our longstanding commitment to continually improve the environmental, health and safety profiles of our chemical products. Appropriate for a wide range of cleaning applications, their unique properties include:

- Low global warming potential (GWP)
- Zero ozone depletion potential
- Not scheduled for regulatory restriction or phasedown
- Neat Novec fluids are exempt from the U.S. EPA definitions for Volatile Organic Compounds (VOCs)
- Non-flammable
- Non-conductive
- Low toxicity
- High margin of worker safety
- Non-corrosive
- Effective and sustainable replacement for nPB, TCE, HCFCs, HFCs and aqueous cleaning
Less waste, less cost

Although a gallon of water is inherently less expensive than a gallon of a fluorinated solvent, aqueous cleaning systems have disadvantages that can cost you in the long run. Here’s a look at how choosing Novec fluids can save you time and money over aqueous cleaning:

<table>
<thead>
<tr>
<th>Engineered for:</th>
<th>To give you:</th>
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<tbody>
<tr>
<td>Low surface tension</td>
<td>Improved cleaning of parts with complex geometries and tight spaces for improved yields</td>
</tr>
<tr>
<td>Quick evaporation</td>
<td>Faster dry times for improved cycle times</td>
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<tr>
<td>Lower energy usage</td>
<td>Significantly lower electricity costs and greater energy efficiency</td>
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<tr>
<td>Less waste</td>
<td>Lower long-term cost of system ownership and conservation of water, a finite and valuable natural resource</td>
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<tr>
<td>Less floor space</td>
<td>More effective use of your facility thanks to smaller system footprint</td>
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<tr>
<td>Compatibility</td>
<td>Prevention of parts corrosion and water spotting associated with aqueous systems and compatibility with wide range of materials*</td>
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*Not all Novec fluids are appropriate for cleaning parts containing certain plastics and elastomeric materials. Check with your 3M representative for details on materials compatibility.
Engineered for long-term regulatory compliance

Novec fluids are not targeted for regulatory phasedown, unlike conventional solvents such as hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs) like Vertrel™ specialty fluids from Chemours. HFCs are now on a phase-down schedule under the Montreal Protocol, following the path of chlorofluorocarbons (CFCs) and HCFCs. 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! Our team of experienced professionals will help you work through the nuances of designing a new cleaning process or incorporating a replacement cleaning solution by sharing expert advice, cleaning trial results of your parts from our lab, and samples and assistance with trials. Visit 3M.com/Novec to learn more and get started today.

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, 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.

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

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