

# 3M Novec Engineered Fluid Preserves World's Largest Squid at Smithsonian's National Museum of Natural History

Giant squid will be displayed in the new Sant Ocean Hall

ST. PAUL, Minn.--([BUSINESS WIRE](#))--3M innovation is helping visitors at the Smithsonian's National Museum of Natural History view a 330-pound, 24-foot giant squid. The wet specimen is being safely preserved by 3M Novec 7100 Engineered Fluid, which is a non-flammable alternative to alcohol. The Novec fluid provides a clear view of the specimen, unlike alcohol, which can yellow. This is the first time that a museum has utilized 3M Novec fluid in a public display for specimen preservation.

3M donated 12,000 pounds or approximately 1,000 gallons of Novec Engineered Fluid to the Smithsonian's Sant Ocean Hall, scheduled to open in September 2008.

According to 3M, Novec fluids work by forming a chemical "envelope" around the organism to protect it from deterioration. Novec fluids are compatible with organic materials and have excellent health, safety and environmental properties. They are non-flammable, non-explosive and low in toxicity – all desirable tissue preservation benefits. In addition, the Novec fluid is clear, actually water-like in appearance, and preserves the natural color of the specimen better than alcohol, allowing museum patrons a real-life view of the giant squid.

"We are pleased to be working with the Smithsonian's National Museum of Natural History and are thrilled that our Novec fluids are a sound solution for the Sant Ocean Hall," states Dr. Joaquin Delgado, vice president and general manager of 3M Electronics Markets Materials Division. "3M strives to find innovative ways to apply its core technologies to solve unique problems and migrate an established technology to a seemingly unrelated market that makes the uncommon connection work."

The 3M Novec technology was first developed in the mid-1990s as replacement fluid for ozone depleting substances. Based on proprietary 3M segregated hydrofluoroether (HFE) technology, this particular Novec fluid is typically used in cleaning and heat transfer applications in the electronics industry for such devices as semiconductors and cell phones. Researchers at 3M developed Novec fluids based on a sustainable technology that balances performance requirements with excellent environmental and worker safety properties. The fluids have zero ozone-depletion potential, short atmospheric lifetime and low global warming potential.

The Novec brand is the hallmark for a variety of patented 3M compounds. Although each has its own unique formula and performance properties, all Novec products are designed to address the need for safe and effective solutions in industry-specific applications. These include precision and electronics cleaning, heat transfer, fire protection, lubricant deposition and several specialty chemical applications.

For example, 3M scientists have formulated a technology for use as a fire suppression fluid to extinguish fires in critical applications, such as computer and control rooms, and within museums and archives, without harming expensive equipment or destroying irreplaceable artifacts and materials. 3M Novec 1230 Fire Protection Fluid has found its way into the archives of the Library of Congress and the Alamo.

For more information regarding 3M Novec products log onto [www.3M.com/Novec](http://www.3M.com/Novec)

About 3M

A recognized leader in research and development, 3M produces thousands of innovative products for dozens of diverse markets. 3M's core strength is applying its more than 40 distinct technology platforms – often in combination – to a wide array of customer needs. With \$24 billion in sales, 3M employs 79,000 people worldwide and has operations in more than 60 countries. For more information, visit [www.3M.com](http://www.3M.com).

*3M and Novec are trademarks of 3M.*

Editor's Note:

Giant squids are mysterious and thrilling creatures. They have not been seen alive by a human eye until just a few years ago. Smithsonian's National Museum of Natural History Sant Ocean Hall will give visitors a chance to see the giant squid that spawned fantastic stories and myths of a huge, multi-tentacled sea creature.

LaBrecheMaryna Polyakova, 612-392-7618mpolyakova@labrechereputations.comor3M Public  
RelationsColleen Harris, 651-733-1566<http://www.3m.com/PressContact>

---

<https://news.3m.com/2008-07-31-3M-Novec-Engineered-Fluid-Preserves-Worlds-Largest-Squid-at-Smithsonians-National-Museum-of-Natural-History>