Safeguard your people, buildings, equipment and operations. Help preserve the world we live in. Protect what matters. All of it.
Smart. Safe. Sustainable.

3M™ Novec™ 1230 Fire Protection Fluid gives you the peace of mind that you’ve made a smart choice, a safe choice, and a choice that will help both sustain your business operations and, with a global warming potential of less than 1, meet important sustainability goals.

When specifying 3M™ Novec™ 1230 fluid, you don’t have to make difficult tradeoffs between performance and safety. 3M Novec 1230 fluid provides performance without compromise and helps you protect everything in your care:

- **Performance**
  - Reaches design concentration in 10 seconds and can extinguish a fire before it even starts

- **Safe**
  - Offers the highest known margin of safety for human occupancy of any clean agent under the NFPA 2001 standard

- **Electronics**
  - Non-conductive and safe for use around energized electronic equipment

- **Valuable Assets**
  - Evaporates quickly without residue, helping protect paper archives, historical documents and priceless works of art

- **Waterless**
  - No risk of water damage – and no residue of any kind

- **Planet**
  - Zero ozone depletion potential and exceptionally low global warming potential helps businesses meet their sustainability goals

- **Flexible**
  - Stored as a liquid and discharged as a gas, enabling air freight transportation and compact storage

What matters most? ▶ Agents at a glance

Specifying a fire protection system is about preparing for the unexpected event of a fire. In a month, a year, a decade or more – whenever it’s needed – the choice of fire protection agent may determine the outcome, and if you are protected, when an unexpected event happens.

<table>
<thead>
<tr>
<th>Property</th>
<th>3M™ Novec™ 1230 Fluid</th>
<th>Inert Gas</th>
<th>HFC-125</th>
<th>HFC-227ea</th>
<th>Water</th>
<th>CO₂</th>
<th>Halon 1301</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designed to extinguish fires</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Control fires only</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Leaves no residue</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Water residue</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Margin of occupant safety¹</td>
<td>67-122%</td>
<td>6-26%</td>
<td>None (design concentration exceeds NOAEL)²</td>
<td>3-34%</td>
<td>N/A</td>
<td>None¹</td>
<td>None (design concentration exceeds NOAEL)²</td>
</tr>
<tr>
<td>&lt;1 Global Warming Potential³</td>
<td>✓</td>
<td>✓</td>
<td>3,170</td>
<td>3,350</td>
<td>✓</td>
<td>1</td>
<td>6,290</td>
</tr>
<tr>
<td>Minimal space requirements</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Varies</td>
<td>25x more cylinders⁴</td>
<td>✓</td>
</tr>
<tr>
<td>NFPA 2001 Standard</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

¹Safety Margin = (No Observed Adverse Effect Level – Design Concentration) / Design Concentration. Per NFPA 2001 standard (2022 edition) for cardiac sensitization and acute toxicity. CO₂ is lethal at design concentration in total flooding applications.

²For Class A, B and C fires per NFPA 2001 standard (2022 edition) NOAEL of 7.5%, minimum design concentration of HFC-125 exceeds NOAEL. PBPK simulation-based model indicates NOAEL of 11.5%, for a 2%-32% margin of safety.

³Intergovernmental Panel on Climate Change (IPCC) 2013 Method, 100-year ITH (CO₂=1).

⁴Protecting a 50x50x9 ft. Class C hazard. 1x 1,000 lb. cylinder of 3M™ Novec™ 1230 fluid vs. 25 x 150 bar inert gas cylinders (439 ft³ ea.).

⁵Protecting a 50x50x9 ft. Class C hazard with a 50% CO₂ Flooding Factor. 1x 1,000 lb. cylinder of 3M™ Novec™ 1230 fluid vs. 25 x 100 lb CO₂ cylinders.
3M™ Novec™ 1230 Fire Protection Fluid was developed in the early 2000s as a revolutionary new fire protection agent delivering high performance, the highest known margin of safety among clean agents under the NFPA 2001 standard and sustainable innovation with a zero ozone depletion potential and a global warming potential of less than 1.

Across over 20 years and more than 50,000 installations in 90+ countries, the performance and safety of 3M™ Novec™ 1230 fluid has been validated. When you specify a fire suppression system using 3M™ Novec™ 1230 fluid, you have 3M’s commitment to:

**Reliability:** Many globally recognized third-party listings and approvals, including:

- NFPA
- ISO
- UL
- VdS
- KFI
- CNPP
- FM Approvals
- DNV
- LPCB
- UL CPR

**Consistency:** Over 20 years ago, we developed a rigorous quality specification for 3M™ Novec™ 1230 fluid. Each shipment includes a 3M Certificate of Analysis verifying the product has been tested to meet both 3M internal and NFPA 2001 (2022 edition, section A.5.1.2.3) standards for quality.

**Support:** Our global team has fire protection know-how and technical expertise recognized throughout the industry. We are committed to outstanding customer support.
We give you our word – and a warranty

Many hydrofluorocarbon (HFC) clean agents are facing a global environmental phase down as a result of their high global warming potentials (GWP), just like halon was phased out due to its high ozone depletion potential (ODP). Fortunately, 3M™ Novec™ 1230 Fire Protection Fluid has no ozone depletion potential and less than 1 global warming potential, more than 99.9% lower than common HFCs.

When you create a specification, you’re making a recommendation that will serve your customer for the long term. Your name and your best effort are in that spec. That’s why we created the 3M™ Blue SkySTM Warranty to help support your specifications.

Here’s how it works:
For systems registered in the 3M™ Blue SkySTM database, if 3M™ Novec™ 1230 Fire Protection Fluid is banned from or restricted in use as a fire protection agent due to its ozone depletion potential or global warming potential within 20 years after installation, we’ll refund the purchase price of the fluid. Find out more at 3M.com/BlueSkyWarranty.