3M™ Novec™ 1230 Fire Protection Fluid

**Non-Branded Clean Agent Specification Example**

1. **Summary of work**
   1. Design, supply and install a complete clean agent total flooding fire suppression system using agent manufactured by a reputable manufacturer with a process known as electrochemical fluorination. (Hereafter referred to as SYSTEM)
2. **Clean Agent Fire Suppression Fluid**
   1. Agent shall be manufactured at an ISO 9001 and ISO 14001 registered facility.
   2. Clean Agent Fluid shall have an Ozone Depletion Potential (ODP) of zero. ODP as defined by the US EPA.
   3. Clean Agent Fluid shall have a Global Warming Potential (GWP) of < 1 (100 year ITH). GWP as defined by the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5) or in US EPA documentation and approvals.
   4. Clean Agent Fluid shall not be one of these greenhouse gases or ozone depleters; Perfluorocarbons (PFCs), Hydrofluorocarbons (HFCs), and Hydrochlorofluorcarbons (HCFCs).
   5. Agents will not be restricted for use in fire protection due to its Ozone Depletion Potential (ODP) or Global Warming Potential (GWP) and is not targeted for phase-down by the Montreal Protocol, nor subject to the European F-Gas Regulations targeting the phase-down of production and import of HFCs into Europe; and will not be affected by U.S. EPA SNAP regulations which would render it either unacceptable or acceptable subject to narrow use limits.[[1]](#endnote-1)
   6. Clean Agent must have a minimum safety factor 60% between the design concentration percentage and the No Observed Adverse Effect Level (NOAEL) for Class A and C hazards. For guidance on safety factors for Class B hazards, contact an approved Original Equipment Manufacturer.
   7. The minimum extinguishing concentration (MEC) determined by test as witnessed per recognized testing laboratory standards (i.e UL 2166, FM 5600) shall be no greater than 3.3%.
   8. Equipment shall be UL listed and FM approved and extinguishing agent shall be component recognized by UL or FM for use in the system.
   9. System cylinders shall be labeled indicating the system manufacturer and agent brand. System service and refill shall be by an authorized manufacturer’s representative and shall be the agent of the original installation brand.

Safety Data Sheet: Consult Safety Data Sheet before use.

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

Technical Information:The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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1. **Acceptable with Narrowed Use Limits**: For non-residential uses where other alternatives are not technically feasible due to performance or safety requirements: a. because of their physical or chemical properties, or b. where human exposure to the extinguishing agents may result in failure to meet applicable narrowed use limits. [↑](#endnote-ref-1)