1.10. Water Mist Systems

1.10.1. Water Mist

A water spray for which the $Dv_{0.99}$, (Dv_f -A drop diameter such that the cumulative volume, from zero diameter to this respective diameter, is the fraction, f, of the corresponding sum of the total distribution) for the flow-weighted cumulative volumetric distribution of water droplets is less than 1000 μ m within the nozzle operating pressure range.

1.10.2. Water Mist System

A distribution system connected to a water supply or water and atomizing media supply that is equipped with one or more nozzles capable of delivering water mist intended to control, suppress, or extinguish fires and that has been demonstrated to meet the performance requirements of its listing and this standard.

1.10.3. Water Mist Atomizing Media

Compressed air or other gases that produce water mist by mechanical mixing with water.

1.10.4. Water Mist Nozzle

A special purpose device, containing one or more orifices, designed to produce and deliver a water spray meeting either the definition of 'water mist' or meeting the specific requirements of an approved water mist fire test protocol.

1.10.5. Additive

Any chemical or mixture of chemicals intentionally introduced into the system.

1.10.6. High Pressure System

A water mist system where the distribution system piping is exposed to pressures of 34.5 bar (500 psi) or greater.

1.10.7. Intermediate Pressure System

A water mist system where the distribution system piping is exposed to pressures greater than 12.1 bar (175 psi) but less than 34.5 bar (500 psi).

1.10.8. Low Pressure System

A water mist system where the distribution piping is exposed to pressures of 12.1 bar (175 psi) or less.

1.10.9. Propellant

Compressed gas used as a prime mover to push water out of storage vessels, through pipe networks, or through distribution components.

1.10.10. Single Fuel System

A water mist system utilizing a single piping system to supply each nozzle

1.10.11. Twin Fuel System

A water mist system in which water and an atomizing medium are supplied to the water mist nozzle utilizing a separate piping system for each medium or a single piping system for both.

