



# Technology – Features and Benefits

FEATURE	BENEFIT	RESULT
Multi-use Fire Suppression Agent	Class A fire extinguishing agent Class B fire extinguishing agent Specialized Class C fire extinguishing ability Tire and Rubber extinguishment Cools metals extremely quickly without violent reactions - Class D fires.	Eliminates confusion at the fire scene over which product to choose for a particular hazard and enables firefighters to extinguish many classes of burning material in structures without changing agents.  Eliminates the need to duplicate inventories of agents for different hazard protection and provides the department with streamlined training procedures.
Enhanced Burnback Resistance	Immediate heat reduction on all burning surfaces with no threat of spontaneous re-ignition for Class A / Class B materials that cannot be extinguished with conventional fire suppressants.	Gain control of fire and ability to assess damage and creates a safe environment for rescue operations.
Reduces Surface Tension of Water	Allows for increased penetration into deep seated fires and delivery of the agent in Class A materials such as hay, cotton, coal, and wood.	Allows for faster heat reduction and reduced release of toxic vapors and smoke.
Performance in confined spaces	Frequent building burn tests have demonstrated no temperature increases and reduction of explosive vapors.	Keeps emergency personnel from harmful exposure to steam burns during initial stages of a fire in a confined space
Vapor lock	Encapsulates vapors below the Lower Explosive Limit (LEL) and reduces re-combustion that may form above the surface of the fuel.	Eliminates the risk of explosion when emergency equipment generates sparks during extrication.
Post-fire Security	Interruption of the free radical chain reaction prevents free radicals from coming together to form soot and dangerous smoke.	The smoke reduction enhances fire fighter's visibility and ability to locate victims.
Ease of Use	Allows for more efficient use of water and less product is needed to extinguish Class A / Class B type fires.	Economical choice and cost effective on department budgets along with conservation of water.



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Rapid Heat Reduction	Ability to overcome principles of low thermal conductivity and quickly remove heat from material that begin as simple Class A to complex Class B fires.	HydraNT® Agent consistently out performs all other agents on extinguishing tire and rubber fires.
Non-toxic Non-Hazardous Bio-degradable	Firefighters can focus on hazardous situations at hand rather than worrying about contamination to themselves and the environment.	Reduced risk to all emergency response personnel along with reduced risk to the environment.
Favorable BOD and COD	HydraNT® Agent easily dilutes, dissolves, and breakdowns with no measurable impact to the environment.	Safe to discharge into streams and rivers along with wastewater treatment systems.
Neutralizes flame spread	Reduces combustion threat of surrounding material and infrastructure.	Protects employees and prevents property loss and damage.
Non-Corrosive	HydraNT® Agent can be pre-mixed into tanks as it will not damage or corrode internal pumps or equipment	Easily applied with standard equipment (Nozzles, Eductors, Proportioners, Extinguishers, CAFS).
No Foam Blanket	HydraNT® Agent has no requirement to form and maintain a foam blanket to extinguish a fire.	Specialized techniques are not required to neutralize fires and no special setup is required when arriving at the fire scene.
100% Miscible in water	HydraNT® Agent will not separate if premixed in a tank	Eliminates concerns related to shelf-life and product stability.
Proportions easily	Can be used with a wide variety of proportioning equipment including fixed, on board, around the pump.	No special equipment is required.
Reduces Thermal Current	Allows fire fighters to aggressively attack Class A / Class B fires since they can reach burning material quicker.	Enhances fire fighter safety and increases confidence when responders approach a fire situation.