

Aquagreen XT™ Fire Extinguishing Agent



A UTC Fire & Security Company

Effective: January 2010
K-83-210

FEATURES

- Low Temperature Use, Down to -40°F (-40°C)
- No Propylene or Ethylene Glycol Additives
- FM Approved
- Readily Biodegradable

EXTINGUISHING AGENT

Aquagreen XT is a foaming wet chemical agent designed for use on Class A and Class B fires. It suppresses fire through a combination of chemical and physical mechanisms. Aquagreen XT provides rapid flame knock down and secures the hazard against the risk of re-ignition. This is accomplished by two means. First, the foam creates a vapor-suppressing barrier that spreads across a liquid fuel separating the fuel from air. Second, with over 50% water content the foaming agent also effectively cools surfaces as the heat is given up to vaporize the water. Aquagreen XT is also naturally freeze-protected as a result of a carefully designed blend of additives. The use of salts negates the need for glycol as a freeze-point depressant. By employing this type of freeze-point depressant system Aquagreen XT is able to achieve an extremely low freezing point while at the same time maintaining fluidity at low temperatures.

Table 1: Aquagreen XT™ Physical Properties

Appearance	Pale green liquid
Specific Gravity @ 77°F (25°C)	1.28
pH	7.5
Minimum Usable Temperature	-40°F (-40°C)
Maximum Usable Temperature	200°F (93°C)
Freezing Point	below -65°F (-54°C)
Viscosity @ 70°F (21°C)	3.23 csks
Viscosity @ -20°F (-29°C)	24.48 csks
Spreading Coefficient	Minimum of 3.0 dynes/cm ²

TOXICITY

Aquagreen XT is an environmentally responsible and relatively benign fire extinguishing agent. Aquagreen XT is readily biodegradable, achieving 75% biodegradation over a 28-day period during environmental testing. Side effects upon exposure to Aquagreen XT were limited to minor skin and eye irritation.

Table 2: Aquagreen XT™ Toxicity Properties

Acute Dermal LD ₅₀ (*)	>5050 mg/kg
Acute Oral LD ₅₀	>5000 mg/kg
Acute Eye Irritation	Minimally Irritating Toxicity Category IV**
Acute Dermal	Non-Irritating Toxicity Category IV**
Biodegradability	Readily Biodegradable 75% in 28 days

PERFORMANCE

Aquagreen XT has undergone rigorous fire and flow testing to ensure that it will perform throughout its operating range of -40° to 200°F (-40° to 93°C). Fire tests include both direct and indirect agent application to a pan fire that was also subjected to a diesel spray fire. The testing closely followed the Australian Standard AS 5062-2006 *Fire Protection for Mobile and Transportable Equipment*. The tests were competed at both ambient and low temperatures fully extinguishing the test fires and preventing re-flash from ignited diesel spray.

APPROVALS AND USE

Aquagreen XT is FM approved for use as a primary or secondary extinguishing and cooling agent in the Kidde Sentinel™ System. It is stored in steel containers, and is pressurized with propelling nitrogen. Recharge agent is sold ready to use, no further dilution or mixing is necessary.

STORAGE

The recommended storage temperature range is 60° to 150°F (16° to 66°C). Aquagreen XT should be stored in its original shipping containers or system cylinders designed for its use.

Sentinel and Aquagreen XT are registered trademarks of Kidde Fire Systems.
*See MSDS for further details.

**Toxicity Category IV: Minimal effects clearing in less than 24 hours.
No "positive" effects at 24 hours.

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If you need more information on this product, or if you have a particular question, contact KIDDE-FENWAL, INC., Ashland, MA 01721.

Kidde Fire Systems
A UTC Fire & Security Company
400 Main Street
Ashland, MA 01721
Ph: 508.881.2000
Fax: 508.881.8920
www.kiddefiresystems.com