Pre-mixed Antifreeze for Wet Fire Sprinkler Systems

#### INSTALLATION

- Evacuate all water from system and drain drops according to NFPA requirements.
- FireFighter GL48 should be tested prior to introduction into the system.
- Do not dilute or add concentrate to FireFighter GL48.
- After filling the system, follow NFPA guidelines for testing the antifreeze. Fluid samples should be tested from a minimum of a high point and low point, and should be comparable to both each other and to the sample of the fluid tested prior to introduction into the system.
- NFPA requires a tag to be affixed to the riser indicating
  the date tested or replaced, the type and concentration by
  volume of fluid used, system capacity (in volume), contractor
  name and license number, and a statement indicating if the
  entire system was drained and replaced with antifreeze.
  Tags are available free of charge from Noble Company or
  your local FireFighter distributor.

#### SYSTEM PROTECTION



% of FireFighter GL48	Freeze	Flow	Burst	Specific Gravity
	Point	Point	Point	@77° F / 25° C
100	-15°F	-25°F	-50°F	1.137

Freeze Point is the temperature where the first ice crystal forms in the fluid.

Burst point is the temperature where the fluid is solid, expanding and bursting the vessel.

## FireFighter ACCESSORIES



The **Palm Abbe** refractometer is fast, convenient, and easy to use. Simply place a drop or two of fluid in the titanium well and press a button. The custom-designed microprocessor is temperature compensating and delivers readings for glycerine and propylene glycol for both percentage by volume and freeze point. Accuracy of +/- .10 %.



The **Hydrometer** measures the specific gravity of propylene glycol and glycerine. Conversion tables allow the user to interpolate readings for percentage of concentration by volume and freeze point. Includes graduated cylinder.

## SYSTEM REQUIREMENTS, LIMITATIONS & CAUTIONS

All fire protection sprinkler systems that use FireFighter GL48 should conform to local, state and NFPA requirements. The use of antifreeze within these systems should also conform to NFPA requirements.

Use of antifreeze solutions should also be in conformance with any state or local health codes. Please contact your local health authorities if you have any questions concerning the codes in your area.

Chemicals which compose FireFighter GL48 can break down over time. NFPA 25 requires that the freezing point of the system should be tested at least once a year. Periodic testing of systems is critical to maintaining the proper concentration and freeze point of the fluid. Leaks, pressure surges, and temperature changes to the system can cause antifreeze to flow out of the system or water to flow into the system changing the freeze temperature.

When using glycerine in metallic pipe, be sure pipe connections are "air tight." The molecular structure of glycerine will allow the product to seep out of loose connections before water, reducing glycerine concentration levels, and thus, lowering freeze protection.



## FDA REFERENCE

FireFighter GL48 is considered "Generally Recognized as Safe" by the Federal Food & Drug Administration. Non-Toxic is used to describe extremely low chronic and acute toxicity. No maximum safe intake for humans has been established.

# TOXICOLOGICAL, ENVIRONMENTAL, & HEALTH INFORMATION

FireFighter GL48 is virtually harmless to animals or plants; however, the disposal of these materials should be in conformance with national, state, and local health codes.

