



FireFighter® Antifreeze

FireFighter Antifreeze

Factory Pre-mixed Antifreeze for Wet Fire Sprinkler Systems

FireFighter non-toxic* antifreeze solutions are designed specifically for wet fire sprinkler systems. Use in place of water and other water-like fluids in sprinkler systems where freezing may either cause damage or interfere with the functioning of systems or equipment and/or toxicity to humans or animals is a concern.



Noble N Company
Simple Solutions... Proven Performance

A division of
**FEDERAL PROCESS
CORPORATION**



VIEW PRODUCT DETAILS
AND DIAGRAMS ONLINE



FireFighter® GL48

FireFighter GL48 is a non-toxic, glycerine-based antifreeze for use in all types of wet fire sprinkler systems, including CPVC. FireFighter GL48 is factory pre-mixed to NFPA guidelines of a 48% glycerine solution. Certified by NSF for use with BlazeMaster® CPVC.

FireFighter® GL38

FireFighter GL38 is a non-toxic, glycerine-based antifreeze for use in all types of wet fire sprinkler systems, including CPVC. FireFighter GL38 is factory pre-mixed to NFPA guidelines of a 38% glycerine solution.



FireFighter® GL38

Color	Orange
Specific Gravity*	1.111
Viscosity*	3.8cp
Density* (grams/ml)	1.08 g/cc
Boiling Point**	218°F



FireFighter® GL48

Color	Orange
Specific Gravity*	1.135
Viscosity*	6.3cP
Density* (grams/ml)	1.132 g/cc
Boiling Point**	218°F

AVAILABLE SIZES

- 5-gallon pails
- 30-gallon drums
- 55-gallon drums
- 275 or 330-gallon totes
- 5,000-gallon tank truck

AVAILABILITY

FireFighter GL38 and GL48 are available throughout the U.S. through wholesale distributors. Please contact Noble Company for your local representative and wholesaler.

CUSTOM BLENDS

Custom formulations are available for lower concentrations of glycerine. Please contact Noble Company for more information.

INGREDIENTS

Active: USP or CP Glycerine

Other: Viscosity Reduction Agent, Food-Grade Dye



SYSTEM PROTECTION

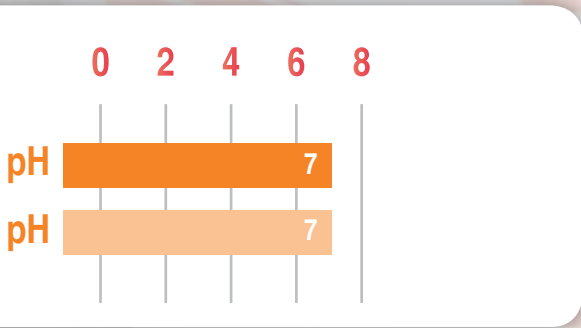
Freeze Point is the temperature where the first ice crystal forms in the fluid. Burst point is the temperature where the fluid is solid, expanding, and bursting the vessel. Minimum burst point is the temperature where the fluid is at a hard freeze. *Specific gravity measured at 77°F/25°C. **Boiling point, density, and viscosity are measured at atmospheric pressure of 760mm. ***Fire point measured using Pensky-Martens Closed Cup test.



Pre-Mixed Glycerine Antifreeze
for Wet Fire Sprinkler Systems

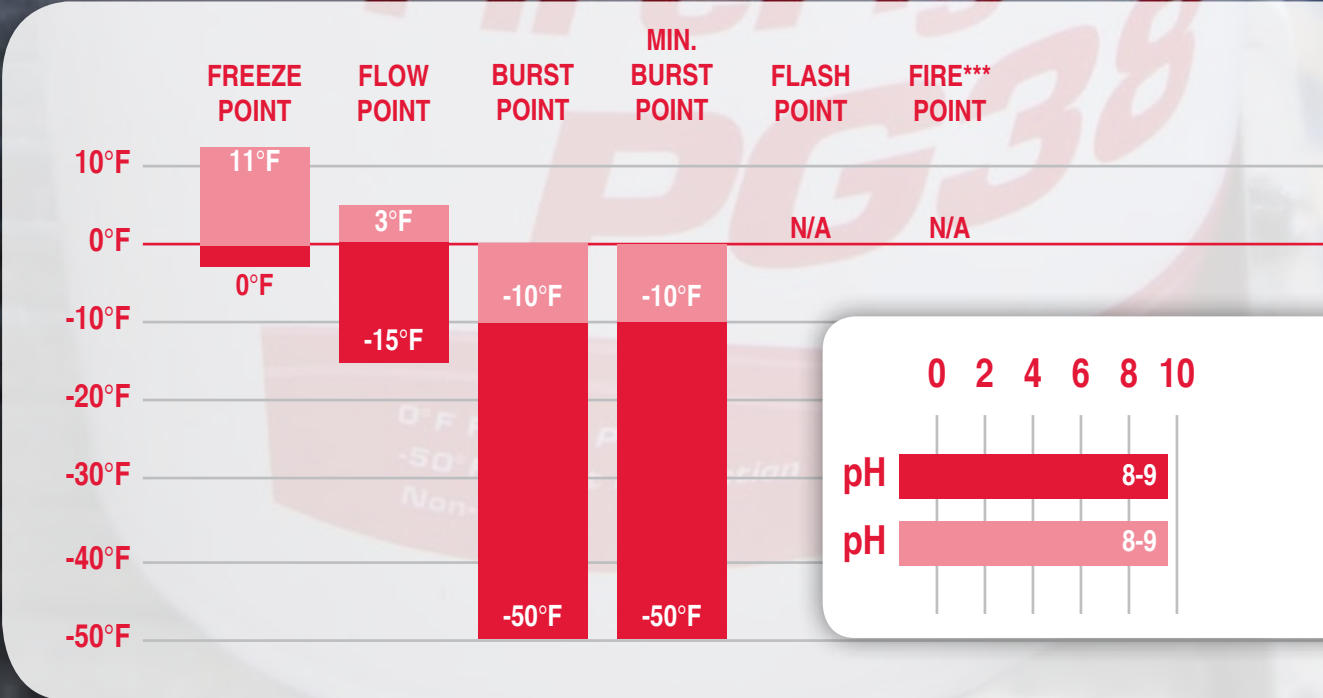
FireFighter®

	FIRE*** POINT	FLASH POINT	MIN. BURST POINT	BURST POINT	FLOW POINT	FREEZE POINT	
	N/A	N/A				0°F	0°F
					-11°F	-15°F	-10°F
					-25°F		-20°F
							-30°F
			-42°F	-42°F			-40°F
			-50°F	-50°F			-50°F



SYSTEM PROTECTION

SYSTEM PROTECTION



FireFighter® PG38

FireFighter PG38 is a non-toxic, propylene glycol-based antifreeze for use in all types of wet fire sprinkler systems, with the exception of CPVC and galvanized. FireFighter PG38 is factory pre-mixed to NFPA guidelines of a 38% propylene glycol solution.

FireFighter® PG30

FireFighter PG30 is a non-toxic, propylene glycol-based antifreeze for use in all types of wet fire sprinkler systems, with the exception of CPVC and galvanized. FireFighter PG30 is factory pre-mixed to NFPA guidelines of a 30% propylene glycol solution.



FireFighter PG30

Color	Red
Specific Gravity*	1.024
Viscosity*	2.6 cP
Density* (grams/ml)	1.027 g/cc
Boiling Point**	218°F



FireFighter PG38

Color	Red
Specific Gravity*	1.030
Viscosity*	3.5 cP
Density* (grams/ml)	1.033 g/cc
Boiling Point**	218°F

AVAILABLE SIZES

- 1-gallon plastic bottles
- 5-gallon pails
- 30-gallon drums
- 55-gallon drums
- 275 or 330-gallon totes
- 5,000-gallon tank truck

AVAILABILITY

FireFighter PG30 and PG38 are available throughout the U.S. through wholesale distributors. Please contact Noble Company for your local representative and wholesaler.

CUSTOM BLENDS

Custom formulations are available for lower concentrations of propylene glycol. Please contact Noble Company for more information.

INGREDIENTS

Active: Propylene Glycol
Other: Viscosity Reduction Agent,
Food-Grade Dye, Corrosion Inhibitor

SYSTEM PROTECTION

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. Minimum burst point is the temperature where the fluid is at a hard freeze. *Specific gravity measured at 77°F/25°C. **Boiling point, density, and viscosity are measured at atmospheric pressure of 760mm. ***Fire point measured using Pensky-Martens Closed Cup test.



Chemicals which compose FireFighter GL38 and GL48 and FireFighter PG30 and PG38 can break down over time.

NFPA 25 requires that the freezing point of the system 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.

TESTING FIREFIGHTER ANTIFREEZE

To test the freeze protection level of FireFighter GL38 and GL48 and FireFighter PG30 and PG38, the correct instrument must be used.

For testing FireFighter GL38 and GL48, Noble Company offers two instruments:

- 1) A laboratory grade hydrometer
- 2) A digital refractometer

For testing FireFighter PG30 and PG38, Noble Company offers three instruments:

- 1) A laboratory grade hydrometer
- 2) An analog refractometer
- 3) A digital refractometer

When testing indicates that the solution has weakened, drain the system according to NFPA requirements and replace with new FireFighter GL38, GL48, PG30, or PG38 according to the installation instructions and all NFPA requirements. Do not add concentrate or dilute.

For further information concerning correct testing procedures and test instruments, contact our technical services department and ask for "How to Choose the Correct Antifreeze Loop Tester," or visit our website, www.noblecompany.com.

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.



INSTALLATION INSTRUCTIONS

Evacuate all water from system and drain drops according to NFPA requirements.

- FireFighter should be tested prior to introduction into the system.
- Do not dilute or add concentrate to FireFighter.
- 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 REQUIREMENTS, LIMITATIONS, & CAUTIONS

All fire protection sprinkler systems that use FireFighter GL38 and GL48, and FireFighter PG30 and PG38 should conform to local, state, and NFPA requirements. The use of antifreeze within these systems should also conform to NFPA requirements. FireFighter PG30 and PG38 should not be used with systems containing galvanized metals or CPVC pipe.

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.

TESTING ACCESSORIES

ECONOMY ANALOG REFRACTOMETER

GOOD

- For testing the freeze point
- Use for testing propylene glycol

For use with: **FireFighter PG38** and **FireFighter PG30**



ECONOMY ANALOG REFRACTOMETER

GOOD

- For testing the freeze point
- Use for testing propylene glycol or glycerine

For use with: **FireFighter PG38**, **FireFighter PG30**, **FireFighter GL48**, and **FireFighter GL38**



ANALOG REFRACTOMETER

BETTER

- For testing the freeze point
- Use for testing propylene glycol
- Can be used to test batteries

For use with: **FireFighter PG38** and **FireFighter PG30**



PALM ABBE DIGITAL REFRACTOMETER

BEST

- Instant results of freezing point (PG & GL) and % concentration by volume
- Use for testing propylene glycol and glycerine
- Auto calibration

For use with: **FireFighter PG38**, **FireFighter PG30**, **FireFighter GL48**, and **FireFighter GL38**





Copper Tube Type L

Tubbing Size	Gallons of Fluid/100 ft.
1/2"	1.210
3/4"	2.510
1"	4.280
1 1/4"	6.520
1 1/2"	9.250
2"	16.060
2 1/2"	23.780

Polybutylene Tube

Tubbing Size	Gallons of Fluid/100 ft.
1/2"	1.02
3/4"	2.06
1"	3.46
1 1/4"	5.16
1 1/2"	7.00
2"	12.34

Schedule 40 Pipe

Tubbing Size	Gallons of Fluid/100 ft.
1"	4.82
1 1/4"	8.29
1 1/2"	11.107
2"	18.42
2 1/2"	24.87
3"	38.40
4"	66.13

BlazeMaster® Pipe

Tubbing Size	Gallons of Fluid/100 ft.
3/4"	3.188
1"	5.018
1 1/4"	7.997
1 1/2"	10.471
2"	16.369
2 1/2"	23.953
3"	35.530

TECHNICAL SUPPORT

Specifications, installation design, installation techniques, and unique applications will be reviewed upon request. Address inquiries ATTN: FireFighter Technical Support, Email us: sales@noblecompany.com, or phone us at: 800-878-5788. Field services are available through factory representatives and Noble Company staff. Contact Noble Company for local representatives.

Additional product information and SDS are available immediately through our website at www.noblecompany.com.



FDA REFERENCE

FireFighter GL38, GL48, PG30, and PG38 are 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 GL38, GL48, PG30, and PG38 are virtually harmless to animals or plants; however, the disposal of these materials should be in conformance with national, state, and local health codes.

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