

GLYCERINE GARD

Fire sprinkler systems are increasingly becoming an integral part of industrial, commercial and residential life safety occupancies. The fire safety industry, including the National Fire Protection Agency (NFPA), promotes several key messages that have led to increasing understanding, usage and regulation of sprinkler systems:

- Fire sprinklers save lives and property
- Fire sprinklers are cost-neutral over time
- Fire sprinklers reduce danger to firefighters

GLYCERINE GARD 48 is Chemical Specialties meticulously blended fluid created to help enhance wet fire system protection and support the fire safety industry.

Effective April 5, 2011 when using propylene glycol or glycerine-based fluids for new wet fire protection systems to replace fluids in existing systems, the National Fire Protection Agency (NFPA) requires use of factory pre-mixing fluid concentrations not to exceed a maximum of 38% propylene glycol or 48% glycerine by volume. Field mixing of any kind is prohibited. For comprehensive details on NFPA anti-freeze requirements please visit the Codes and Standards section of www.nfpa.org.

About GLYCERINE GARD 48

- Complies with NFPA'S most recent wet fire protection system requirements
- Certified factory premixed antifreeze using the highest quality of glycerine
- A 48% glycerine concentration by volume
- For use in new and existing residential and non residential applications
- Freeze point -15 °
- Burst Point - 50 °
- Color : Orange
- Accompanied by product documentation and identification tags

Flexible Packaging Options

5, 15, 30 and 55 gallon pails and drums
275 gallon totes

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SYSTEMS PROTECTION

| % of GLYCERINE-GARD 48 | FREEZE POINT -15°F | FLOW POINT -15 F | BURST POINT | SPECIFIC GRAVITY @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 and expanding and bursting the vessel.

Glycerine % by volume converted to % by weight

Glycerine % by weight freeze points

| | | | |
|-----|--------|-----|-------|
| 5 | 6.2% | 5 | 31 |
| 10 | 12.2% | 10 | 29 |
| 20 | 23.8% | 20 | 23 |
| 25 | 29.4% | 25 | 19 |
| 30 | 34.9% | 30 | 15 |
| 35 | 40.3% | 35 | 10 |
| 40 | 45.5% | 40 | 4 |
| 45 | 50.6% | 45 | (-2) |
| 50 | 55.6% | 50 | (-9) |
| 55 | 60.5% | 55 | (-19) |
| 60 | 65.2% | 60 | (-31) |
| 65 | 69.9% | 65 | (-45) |
| 70 | 74.5% | 70 | (-38) |
| 75 | 79.0% | 75 | (-22) |
| 80 | 83.40% | 80 | (-5) |
| 85 | 87.60% | 85 | 12 |
| 90 | 91.80% | 90 | 30 |
| 95 | 96.00% | 95 | 46 |
| 100 | 100% | 100 | 63 |



READY TO USE GLYCERINE BASED ANTIFREEZE FOR WET FIRE SPRINKLER SYSTEMS

INSTRUCTIONS FOR USE:

- *Drain all the water from the system and drain drops according to NFPA requirements.
- *GLYCERINE-GARD 48 should be tested prior to introduction into the system.
- *DO NOT DILUTE or add concentrate to GLYCERINE-GARD 48.
- *After filling the system follow all the guidelines for the testing of antifreeze required by NFPA. Samples of the fluid should be tested from a minimum of high point and low point and should be comparable to each other and to the sample of fluid tested that was taken prior to the introduction into the system.
- *As required by NFPA tags are 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, license number and a description of the services performed including a statement indicating that the entire system was drained and replaced with GLYCERINE-GARD 48 antifreeze. tags are available from your local fire department or your GLYCERINE-GARD 48 distributor.

SYSTEM LIMITATIONS, REQUIREMENTS & CAUTIONS:

All fire protection sprinkler systems that use GLYCERINE-GARD 48 as well as use of antifreeze within these systems, should conform to local, state and NFPA requirements. Please contact your local health authorities if you have any questions concerning codes in your area.

NFPA 25 requires that the freezing point of a system should be tested annually. Periodic testing of the system is critical to maintaining the proper concentration and freeze point of the fluid. Chemicals in GLYCERINE-GARD 48 can break down over time. This along with 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 which would result in a change in the freeze temperature.

The chemicals in GLYCERINE GARD 48 are non-toxic and non hazardous. Any disposal of GLYCERINE GARD 48 should be in compliance with all national, state, and local health regulations.