



State of Alaska
Department of Public Safety
Division of Fire and Life Safety

Sean Parnell, Governor
Joseph A. Masters, Commissioner

Policy 10-2 Rescinded
Use of Antifreeze in NFPA 13, 13D, 13R and 25; 2010 Editions
Effective March 21, 2011

Based on new Technical Interim Agreements (TIA) issued by NFPA, effective 21 March 2011, Policy Letter 10-2 is rescinded and the newly issued TIAs are in effect. Briefly, the TIAs are explained as follows: (TIA 1012, 1013 and 1015)

1. Antifreeze compounds are allowed in all new sprinkler systems with the following conditions:

- Only glycerin and propylene glycol can be used
 - 1. Glycerin can be up to 48 percent by volume
 - 2. Propylene glycol can be up to 38 percent by volume.

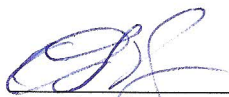
- Only factory premixed solutions can be used

These concentrations provide freeze protection levels down to approximately -16°F for glycerin and -3°F for propylene glycol. Where a temperature thermal deficit exists additional mechanical means must be employed to protect the system from freezing.

2. These changes apply to all occupancies and not just those in dwelling units.

- Additionally, a TIA on NFPA 25 (TIA 1014) was released that places similar restrictions on the use of antifreeze in existing systems. If the system meets the following two conditions, when tested at multiple locations, it can remain in use.
 - 1. The antifreeze compound can be positively identified and is either glycerin or propylene glycol.
 - 2. The concentration does not exceed 50 percent by volume for glycerin and 40 percent by volume for propylene glycol and does not require modification. Where a temperature thermal deficit exists additional mechanical means must be employed to protect the system from freezing.

If for any reason the solution must be replaced or modified, then one must drain the system and use factory premixed solutions at the 48 percent and 38 percent maximum concentrations, respectively. Alternative designs for these systems should be submitted to the Authority Having Jurisdiction with an Application for Modification for case by case approval.


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State Fire Marshal

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Date

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