

Antifreeze concentration limits (NFPA 13)

NFPA 13

Listed antifreeze solutions and maximum concentration for sprinkler systems.

Reference table

Antifreeze	Max concentration	System type
Propylene glycol (listed)	30% by volume	Residential and commercial
Glycerine (listed)	38% by volume	Residential and commercial
Factory-premixed listed solution	Per listing	All
Sodium chloride brine	Prohibited	—
Calcium chloride brine	Prohibited (new systems)	—

Notes

- Post-2012 NFPA 13 prohibits field-mixed antifreeze; only listed pre-mixed solutions.

Source: NFPA 13 (2022) §7.6.