ANTIFREEZE SOLUTION TESTING SERVICES

nfpaglobalsolutions.com | dyne.lab@nfpaglobal.com

WHY TEST ANTIFREEZE SOLUTION?

Antifreeze solutions can change over time due to dilution, leakage, improper mixture ratios, contamination, or environmental conditions. Changes in solution concentration can affect freeze protection and system performance, potentially increasing the risk of component damage or impairing the operation of a fire sprinkler system. Antifreeze solution testing provides objective laboratory data that can be used to support maintenance decisions, verify compliance with manufacturer specifications, and meet applicable NFPA inspection, testing, and maintenance requirements.

LAB TESTING

Our laboratory uses industry standards to test your antifreeze solution to make sure it will perform effectively in a fire situation. We will test your antifreeze solution in accordance with NFPA 25-Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems.

Listed Antifreeze Verification
We can verify whether the chemical composition of your antifreeze solution matches a known listed product.

Ion chromatography is used to quantify the concentration of a variety of unique components that distinguish listed solutions from legacy solutions. Due to nondisclosure agreements, the exact chemical composition of listed antifreeze samples cannot be reported. Therefore, Dyne Fire Protection Labs simply reports (PASS or FAIL) whether the chemical composition matches the chemical composition of the antifreeze specified on the report.

WHY TEST WITH DYNE?

- Test reports in 5-business days or less (rush 24 hour turn-around available)
- Free Antifreeze Solution sample kits
- Free shipping within the contiguous United States (limited free 1-way shipping to Alaska, Hawaii, Puerto Rico, and Canada, inquire for details)
- Comprehensive reports and tank tags
- Online access to results and return forms
- Immediate communication with our quality technician or customer service staff

RELEVANT STANDARDS

- NFPA 25, Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems

FREE SAMPLE TEST KITS & SHIPPING

- Each kit contains 2 sample containers, a marker, and a form
- UPS Ground shipping to you is included as well as return labels (UPS/USPS) that can be used within the contiguous United States (limited 1-way free shipping to Alaska, Hawaii, and Canada, inquire for details.)



NFPA GLOBAL SOLUTIONS

Contact Us!

800-632-2304
DYNE.LAB@NFPAGLOBAL.COM

TEST CONDUCTED	TEST TYPE	PURPOSE
Appearance	Physical Property	Analyzed for color, apparent thickness, and any sediment, rust or particulates.
Refractive Index	Physical Property	Provides an indication of the concentration of listed antifreeze solutions described in NFPA 25.
Density (Specific Gravity) (g/cm^3)	Physical Property	Provides an indication of the concentration of listed antifreeze solutions described in NFPA 25.
pH	Physical Property	Indicates the degree of degradation of the solution and its likelihood to degrade the piping.
Percent Concentration (% by volume)	Performance	A calculated value based upon the refractive index and density of a sample. This value will be reported as percent by volume.
Estimated Freeze Point (°F/°C)	Performance	A calculated value based upon the percent concentration. This value is determined by chemical studies with specific types of antifreeze. Values will be reported in degrees Fahrenheit and Celsius.
Listed Antifreeze Verification*	Performance	Verify whether or not the sample chemical compositon matches a known listed product.
Overall Pass/Fail Result	Overall Result	The overall result will be determined with a clear recommendation for continued use or replacement.

When the antifreeze type is not known, Dyne can help verify if the solution contains propylene glycol or glycerine but contamination, extreme dilution, and mixing of antifreeze types can make accurate determination difficult in some cases. Samples that cannot reliably be determined to be one of the accepted antifreeze solutions will need to be replaced. Dyne will be unable to estimate the percent concentration (% by volume) and freeze point (ºF/ºC) of unknown samples.

*Available upon request only. Additional fees apply.