

Antifreeze

Quick, Easy, Accurate & Independent

Introduction

Remove the liability of field testing errors by allowing a certified independent laboratory to test your antifreeze solutions. Field refractometers can work for field testing but only if you are absolutely sure of the type of antifreeze chemical that has been added to the system. Each antifreeze solution has specific refractometers calibrated for them. If an improper refractometer is used, accurate and precise results cannot be obtained.

Our goal at Dyne is to provide you with a worry-free system for meeting your antifreeze solution testing requirements.

Laboratory

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.

Certifications

Dyne Fire Protection Labs is certified by the International Standards Organization ISO 9001 Standards for Quality Management System.

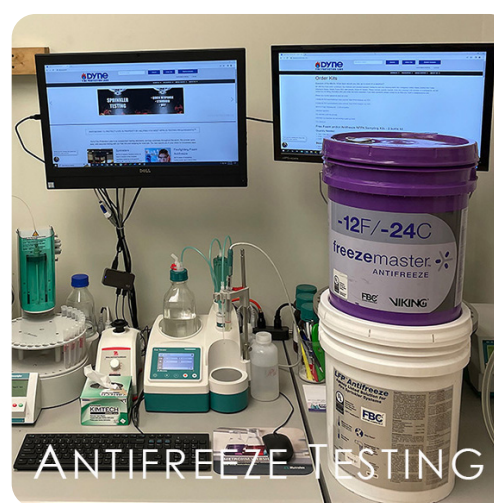


Free foam/antifreeze solution sample kit

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

Standards

- NFPA 25



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 apart and from legacy solutions. Due to non-disclosure 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.

Tests 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.
Estim ¹ ated 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 composition 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.

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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 (°F/°C) of unknown samples.

*Available upon request only. Additional fees apply.