**Q & A: What Qualifies Dyne to Test Your Antifreeze Solution Samples?**

**Q: What are the NFPA requirements?**

**A:** NFPA 25 - 5.3.4 Antifreeze systems. Annually, before the onset of freezing weather, the antifreeze solution shall be tested using the following procedure. If the antifreeze is not replaced in accordance with 5.3.4(1)(a) and 5.3.4(1)(b), test samples shall be taken at the top of each system and at the bottom of each system. The specific gravity of each solution shall be checked using a hydrometer with a suitable scale or a refractometer having a scale calibrated for the antifreeze solution.

**Q: Is Dyne a recognized testing laboratory?**

**A:** Dyne Fire Protection Labs has been in the fire service laboratory testing business since 1999. During this time, Dyne has tested for a variety of business and currently tests for 34 of the top 100 fortune 500 companies.

**Q: Is Dyne acceptable to the Authority Having Jurisdiction (AHJ)?**

**A:** While NFPA does not approve any specific lab, they do say the following in the annex of NFPA 25:

A. 3.2.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

For an AHJ to determine acceptability of our lab, Dyne must show NFPA compliance (or another relevant standard).

**Q: How does Dyne meet NFPA's requirements for testing antifreeze?**

**A:** NFPA 25 does not require a lab to do this test but it can take some liability off your hands. Dyne issues a report based on the following from NFPA 25:

5.3.4.4.1* For systems installed prior to September 30, 2012, listed antifreeze solutions shall not be required until September 30, 2022, where one of the following conditions is met:

(1)* The concentration of the antifreeze solution shall be limited to 30 percent propylene glycol by volume or 38 percent glycerine by volume.

(2)* Antifreeze systems with concentrations in excess of 30 percent but not more than 40 percent propylene glycol by volume and 38 percent but not more than 50 percent glycerine by volume shall be permitted based upon an approved deterministic risk assessment prepared by a qualified person approved by the authority having jurisdiction.

Dyne utilizes a refractometer as allowed in 5.3.3 of NFPA 25. The refractometer goes through strict calibration procedures.

**Q: Who else trusts Dyne with their compliance testing?**

**A:** U.S. military including Air Force bases and Coast Guard. Top petroleum, refining, and energy (Colonial Pipelines, Exxon Mobil, Marathon, Mobil, Phillips 66, Kinder Morgan, Tesoro), marine safety (Crowley Petroleum, Hiller Systems Inc, Drew Marine, Vane Brothers), shipping (Chevron Shipping Company), chemical (DuPont, Nova Chemicals, BP Chemical, Dow Chemicals), and fire safety companies across the globe.
Q: Does Dyne have any listing or labeling practices as an organization concerned with product evaluations?
A: As an ISO 9001 accredited company, we are committed to high quality and laboratory standards. This includes the use of NIST traceable calibrated lab equipment and technicians with strong chemistry and/or engineering backgrounds. Dyne Fire Protection Labs is proud to have our experts actively participate in the codes & standards processes such as NFPA 11, NFPA 16, NFPA 25, UL 162 Industry Advisory Board.

Q: Is Dyne qualified?
A: NFPA defines qualified as the following:

3.3.34 Qualified. A competent and capable person who has met the requirements and training for a given field acceptable to the AHJ. (96, 2017)

Q: What other reasons make Dyne a competent lab I can trust?
A: • Dyne has been in the fire service laboratory testing business since 1999.
• Dyne is an ISO-9001-certified company – 2004 to today.
• Dyne employees actively participate in the codes and standards processes such NFPA 11, NFPA 16, NFPA 25, UL 199 Industry Advisory Board.
• Dyne conducts detailed, documented and continuous training of all its employees.
• Dyne processes insure calibrated and maintained equipment is used at all times.
• Dyne has detailed documented work instructions for testing performed.
• Dyne is strictly a testing company and therefore is independent and unbiased.
• Dyne participates with both foam and sprinkler manufacturers in round robin testing where samples are tested by multiple labs to ensure the results are equivalent.

Q: What do Dyne's current customers like best?
A: • Guaranteed turnaround time: 5-business days for standard, 1-business day expedited available
  • Free test kits and shipping available for most types of testing within the continental U.S.
  • Easy ordering: Kits can be requested online, are shipped the same day or next business day
  • Access to reports online and outstanding customer service
  • Reminders sent out to keep your testing on track