

Technical Bulletin

Understanding NSF/ANSI 61

About NSF

NSF International is a not-for-profit, non-governmental organization and is considered the world leader in standards development, product certification, education and risk-management for public health and safety. Founded in 1944 and headquartered in Ann Arbor, MI, NSF International services manufacturers operating in 80 countries.

Development of NSF/ANSI 61

Prior to 1988, the U.S. Environmental Protection Agency provided the regulatory framework and approval process for plumbing products and components into the water distribution systems. In 1984, the U.S. EPA expanded the protocol into a product evaluation and inspection program. They formed a consortium led by NSF International, American Water Works Association Research Foundation, The Association of State Drinking Water Administrators, the Conference of State Health and Environmental Managers and The America Water Works Association to develop the standard.

Based on the work of this consortium, *NSF/ANSI Standard 61 – Drinking water system components – Health effects* was published in 1988. The intent is to establish minimum requirements for the control of potential adverse human health effect from products that contact drinking water.

Scope of the Standard

NSF/ANSI Standard 61 covers indirect additives products and materials, including process media, protective materials, joining and sealing materials, pipes and related products, mechanical devices, and mechanical plumbing devices (including faucets). In essence, every material from the well or water intakes through to the faucet are covered.

NSF/ANSI Standard 61 addresses crucial aspects of drinking water system components: whether contaminants that leach or migrate from the product/material into the drinking water are above acceptable levels in finished waters.

The standard also covers products, components and materials. When a material is certified under Standard 61, its certification indicates use restrictions on parameters such as maximum use temperature or surface area to volume ratio when the material is used in a finished product. This option allows manufacturers using certified materials to bypass some or all chemical and microbiological testing when seeking certification, and assures that finished products meet all requirements.

Current Status of NSF/ANSI Standard 61

As of 2010, 46 states and 11 provinces/territories have legislation, regulations or policies requiring or recommending drinking water system components to comply with NSF/ANSI Standard 61.

No state requirement – Connecticut, Louisiana, Nebraska, Hawaii



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Poly Processing Frequently Asked Questions

 Poly Processing is the ONLY company offering chemical storage tanks certified to NSF/ANSI 61 standards including FRP, steel and polyethylene. Other companies have NSF/ANSI 61 certification for <u>potable water only</u>. They <u>cannot</u> supply NSF/ANSI 61 certified <u>chemical storage</u> tanks.

Is the approval limited to specific chemical storage? Yes

Acetic Acid 80% Peracetic Acid 10%

Aluminum Sulfate 50% Phosphoric Acid 75%

Calcium Carbonate 100% Poly Aluminum Chloride 100%

Calcium Chloride 30% Polyorthophosphate 100%

Chlorine Dioxide 38% Potable Water

Citric Acid 100% Potassium Hydroxide 50%

Copper Sulfate 25% Sodium Aluminate 100%

Deionized Water 100% Sodium Bisulfite 40%

Ferric Chloride 50% Sodium Carbonate 85%

Ferric Sulfate 60% Sodium Chloride 26%

Ferrous Chloride 37% Sodium Chlorite 34%

Ferrous Sulfate 30% Sodium Hydroxide 50%

Hydrochloric Acid 37% Sodium Hypochlorite 0.08%

Hydrofluoric Acid 52% Sodium Hypochlorite 15%

Hydrofluosilicic Acid 30% Sodium Permanganate 40%

Hydrogen Peroxide 10% Sodium Silicate 100%

Liquid Ammonium Sulfate 45% Sulfuric Acid 98%

Magnesium Chloride 35% Zinc Orthophosphate 100%

- Are we seeking additional chemicals to add to our certification? Yes
- What resins are certified? OR-1000™
- What tank styles are certified? Any tank lined with OR-1000™
- What fittings and gaskets can I use on my certified tank?
 - *PVC or CPVC



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- o *316SS, Titanium, C-276, Monel
- *EPDM, Viton GF®
- * denotes specific parts and materials that have been authorized for use in the OR-1000™ tank system by NSF. Certain suppliers and trade names apply.
- What is VitonGF®? Dupont fluoroelastomer that is NSF/ANSI 61 certified
- Why can't we use our standard Viton? Latharged cured viton contains lead which is not allow to be introduced into drinking water systems
- Can I mix fittings and gaskets on a tank system and still be NSF certified? Yes, as long as they are from the list above which are components meeting NSF/ANSI 61 Certification
- Can I use a PE foam manway gasket? Yes, NSF does not consider dome fittings as being in contact with the chemical.
- Is there added cost for a NSF/ANSI 61 Certified tank? NO
- Am I limited to number of fittings I can place on a tank? NO
- How do I verify Poly Processing Company is NSF/ANSI 61 Certified? Click on the following link http://nsf.org/Certified/PwsComponents/Listings.asp?Company=82070&Standard=061
- Is there a size limitation? Yes, any tank size ≥ 60 gallons are certified to NSF/ANSI 61
- What documentation do I receive? Your order will state that your tank system is NSF/ANSI 61 Certified and your tank will be labeled as NSF/ANSI 61 Certified per plant location.
- What is the difference between "Approved" vs. "Certified"? NSF does not approve anything. They "Certify" product, components and systems to a given standard.