



**Summary of Substantive Changes  
between the 2013<sup>e1</sup>(R2018) and the 2021 editions of  
ASTM F1973, “Factory Assembled Anodeless Risers and Transition  
Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and  
Polyamide 12 (PA12) Fuel Gas Distribution Systems”**

**Presented to the IAPMO Standards Review Committee on March 13, 2023**

**General:** The change to this standard may have an impact on currently listed products. The substantive changes are:

- D2513-99 has been removed for *Polyamide 11 pipe*.

**Section 1, Scope:**

*1.1 This specification covers requirements and test methods for the qualification of factory assembled anodeless risers and transition fittings, for use in polyethylene (PE), in sizes through NPS 8<sup>16</sup>, and Polyamide 11 (PA11) and Polyamide 12 (PA12), in sizes through NPS 6, gas distribution systems.*

**Section 2, Referenced Documents:** Note 1 was removed and subsequent notes renumbered.

*~~NOTE 1—For over 40 years D2513 was the singular US CFR Title 49 Part 192 referenced Standard Specification codifying the installation and use of thermoplastic gas piping in jurisdictional installations. Initially all materials (PE, PVC, ABS, CAB) were contained within the body of the standard D2513. In later years D2513 was completely reformatted to make it more user friendly by moving material specific requirements from the standard’s body to mandatory annexes. The next major change occurred late in 2009 at which time all thermoplastic materials, except polyethylene, were removed from D2513 changing its Title and Scope from a thermoplastic gas piping standard to a polyethylene-only gas piping standard. This recent change required that new standards be developed for those materials that were removed from D2513 including PA11. This causes problems for PA11 piping because it has been referenced and permitted for jurisdictional use and installation under US CFR Title 49 Part 192 as complying with D2513 and D2513 no longer has the A5 polyamide annex and Part 192 still references D2513-99 which makes for potential confusion. This puts PA11 gas piping standards into somewhat of a limbo since D2513 is now a PE-only specification is referenced in all of these standards. Therefore until Part 192 is revised to reference the new PA11 specification, F2945, PA11 has to fall back to citing the US Code referenced 1999 edition of D2513 in related standard such as this one. Until CFR Title 49 Part 192 references the newly developed thermoplastic gas piping standards for those materials removed from D2513, there will be dual references, both D2513-99 and F2945 for PA11, as seen in this standard. At which time Part 192 references F2945, the PA11 gas piping standard, all references to D2513 and this note will be removed from these standards.~~*

**Section 4, Materials and Manufacture:**

*4.3.2 Polyamide 11 pipe shall comply with the requirements of Specifications ~~D2513-99~~ and F2945.*



Section 6, Design Qualification Requirements:

6.7 Tensile Pull Test Requirements:

.....

6.7.4 Each nominal size transition design, ~~in medium density~~ PE, PA11 or PA12 shall be tested, except testing of the heaviest wall (lowest SDR) polyethylene or polyamide 11 and polyamide 12 piping shall qualify all thinner wall polyethylene or polyamide 11 or polyamide 12 pipe joints of the same outside diameter.

Section 8, Marking:

8.1.3 The PA 11 piping's designation with Specification ~~D2513-99 and its Annex 5~~ [F2945](#) in the following format example- PA32312 EF.