Xirtec® CPVC for Potable Water Applications

Short Form Specifications

GENERAL REQUIREMENTS
Operating temperature for Xirtec CPVC used in hot and cold water distribution systems shall not exceed 160°F. Installation practices shall conform to IPEX USA LLC guidelines.

SCOPE
This specification sheet covers the manufacturers' requirements for Xirtec CPVC Schedule 80 IPS pressure pipe and Schedule 80 IPS pressure fittings. The pipe and fittings meet or exceed all applicable ASTM and NSF standards and are suitable for potable water.

XIRTEC CPVC MATERIALS
Rigid CPVC (chlorinated polyvinyl chloride) used in the manufacturing of Xirtec CPVC Schedule 80 pipe complies with the material requirements of ASTM D1784 and has a cell classification of 24448. Rigid CPVC used in the manufacturing of Schedule 80 Fittings shall meet the material requirements of ASTM D1784 and have a cell classification of 23447. Raw material used in the manufacturing shall contain the standard specified amounts of color pigment, stabilizers, and other additives. The compounds used are listed to the requirements of NSF 61 for use in potable water service. The compound must be Corzan grade. The pipe compound shall be listed and labelled as having a Flame Spread Index (FSI) of not more than 25 and a Smoke Developed Index (SDI) of not more than 50 when tested in general accordance with ASTM E84 or UL 723.

DIMENSIONS
Physical dimensions and properties of Xirtec CPVC Schedule 80 pipe shall meet or exceed the requirements of ASTM F441. Physical dimensions and properties of CPVC Schedule 80 fittings – socket type – shall meet the requirements of ASTM F439.

Physical dimensions and properties of Xirtec CPVC special engineered fittings shall meet the requirements of ASTM F1970.

MARKING
Xirtec CPVC Schedule 80 pipe is marked as prescribed in ASTM F441 and NSF 14. The marking includes the following: IPEX; Xirtec CPVC 24448; IPS CPVC and the schedule pressure rating at 73°F; ASTM F441; NSF 14; and NSF 61 Potable. CPVC Schedule 80 fittings are marked as prescribed in ASTM F437 and F439, or F1970. The marking includes the following: IPEX; CPVC and the size of the fitting; ASTM F437 or ASTM F439; NSF 14; and NSF 61 potable.

SAMPLE SPECIFICATION
All Xirtec CPVC Schedule 80 pipe shall conform to ASTM F441/F441M and be third party certified to NSF 14. All Xirtec CPVC Schedule 80 pipe from 1/2" to 6" shall be made with a CPVC compound having a minimum cell classification of 24448. Pipe shall be of 10- or 20-foot lengths.

All Xirtec CPVC fittings must me third party certified to NSF 14. All Xirtec CPVC Schedule 80 fittings from 1/2" to 6" shall be made with a CPVC compound having a minimum cell classification of 23447.

All Xirtec CPVC Schedule 80 socket fittings shall conform to ASTM F439.

All Xirtec CPVC flanges shall have a 150-lbs bolt pattern as per ANSI B16.5 and conform to ASTM F1970 with pressure ratings of 150psi at 73°F.

All Xirtec CPVC Schedule 80 unions socket shall conform to ASTM F439 and meet ASTM F1970 with pressure ratings of 150 psi at 73°F.

All Xirtec CPVC one-piece ball valves & threaded adapters shall meet ASTM F1970 with pressure ratings of 400 psi at 73°F and 100 at 180°F.

The CPVC fitting compound shall be pressure rated in accordance with ASTM D2837 and have a hydrostatic design basis of 4000 psi at 72°F and 1000 psi at 180°F as listed in PPI publication TR-4. All CPVC Schedule 80 pipe and fittings shall be made from a 4000 psi HDB PPI rated compound.

All pipe, fittings and valves shall be compatible, manufactured using Corzan compound and be produced by one manufacturer as supplied by IPEX.

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