SIMTECH Process Systems | Expertise In Engineered Plastics

KYNAR®– PVDF SPECIFICATION

1.0 PIPE

1.1 Material

Pipe shall be extruded from virgin, pure, unpigmented homopolymer KYNAR resin, as manufactured by ARKEMA Chemicals, Inc. Material shall meet or exceed requirements of Table 1 of ASTM D-3222. Pipe manufacturing shall not employ any stabilizers, antioxidants, fillers, pigmentation or additives of any kind. Kynar homopolymer resins may be safely used in articles for repeated contact with food per Title 21, Code of Federal Regulations, Chapter1, part 177.2510. Kynar homopolymer resin grades have been listed with NSF under Standard 61, Standard 51 and Standard 14

1 .2 Flammability

Simtech's KYNAR PVDF meets Factor Mutal (FM 4910)/UL2360 burn test criteria and ASTM E-84/UL-723

1 .3 Pressure Rating

System (pipe and fittings) shall be pressure rated in accordance with ASTM D-2837. Pipe shall be manufactured to an SDR (standard dimension ratio) in order to provide the same pressure rating in all diameters. Pipe shall be (select one):

SDR 21 = 232 PSI (PN16)

PN = Nominal Pressure Rating in Bar

1 .4 Dimensions and Tolerances

All pipe and fittings shall comply with the dimensions and tolerances outlined in ASTM D-3261. Pipe shall have a 2.5 safety factor for a 50-year life. Pipe shall be furnished in 5-meter (16.4 ft) length.

2.0 FITTINGS

2.1 Material

See material under PIPE section 1.0

2.2 Pressure Fittings

All pressure pattern fittings (elbows, tees, flanges and reducers) from ½" (20 mm) through 12" (315 mm) shall be injection molded and shall have the same pressure rating as the pipe. Fittings shall not contain any stabilizer, antioxidants, fillers, pigmentation or additives of any kind. All fittings shall have a 2.5 safety factor for a 50-year life.

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3.0 JOINING

3.1 Welding Method

All pressure fittings shall be socket fusion type joints. All fusion-welded joints to be performed in accordance with ASTM D-2657 and piping manufacturers recommendations.

3.2 Welding Certification and Training

Training and certification shall be conducted by a direct Simtech employee. Each welder will be fully trained on the welding equipment for the particular project and will be required to demonstrate the full process of welding. The process includes set up of the tool, loading of the pipe and/or fittings, alignment of the tool, and the weld process. Training will also include minor maintenance techniques to keep tools in ideal operating conditions. After an operator has demonstrated their ability to operate the equipment, Simtech will issue a certified welders card upon completion.

4.0 MANUFACTURER

SIMTECH
800-800-1908
www.Simtech.com