



**VALVE**

Industrial Ball Valve, Industrial Ball Check Valve, Industrial Gate Valve, Industrial Diaphragm Valve, Butterfly Valve, Industrial Y - Strainers Valve, Needle Valve, Industrial Butterfly Check Valves

**Marking and Uniformity:** Pipe and fittings made from ASTRAL CHEM PRO CPVC compounds shall be clearly marked with the manufacturer's name or trademark, material designation applicable ASTM Standard.

**APPLICABLE STANDARDS**

ASTM D1784 - Standard Specification for Rigid Polyvinyl Chloride (PVC) and Chlorinated Polyvinyl Chloride (CPVC) Compounds.

ASTM F441 - Standard Specification for Chlorinated Polyvinyl Chloride (CPVC) Plastic Pipe, Schedules 40 and 80.

ASTM F437 - Standard Specification for Threaded Chlorinated Polyvinyl Chloride (CPVC) Plastic Pipe Fittings, Schedule 80.

ASTM F439 - Standard Specification for Socket-Type Chlorinated Polyvinyl Chloride Plastic Pipe Fittings, Schedule 80.

ASTM F402 - Standard Practice for Safe Handling of Solvent Cement and Primer Used for Joining Thermoplastic Pipe and Fittings.

ASTM F493 - Standard Specification for solvent Cements for Chlorinated Polyvinyl Chloride (CPVC) Plastic Pipe and Fittings.

ASTM F656 - Standard Specification for Primers Used in Solvent Cement Joints of Polyvinyl Chloride (PVC) Plastic Pipe and Fittings

**BASIC USE**

ASTRAL CHEM PRO CPVC pipe and fittings are intended for use in both pressure and drain applications in general chemical manufacturing plants, pulp and paper plants, waste water treatment plants, metal treating/electroplating plants, water purification plants, and food processing plants where excellent resistance to corrosion from a wide range of chemicals, acids, and bases at temperatures up to 93°C is required.

**SYSTEM DESIGN**

System design shall be in accordance with standard industry practice for thermoplastic industrial piping systems and shall take into consideration such factors as pressure and flow requirements, friction loss, operating temperatures, support spacing, anchoring, bracing and thrust blocking, temperature correction factors, joining methods, chemical environment, collapse and loading, and thermal expansion and contraction.



## ABOUT ASTRAL CHEM PRO

ASTRAL CHEM PRO is proven CPVC piping system meeting all challenging application requirement of industrial piping system. It gives trouble free service to the industry for years together.

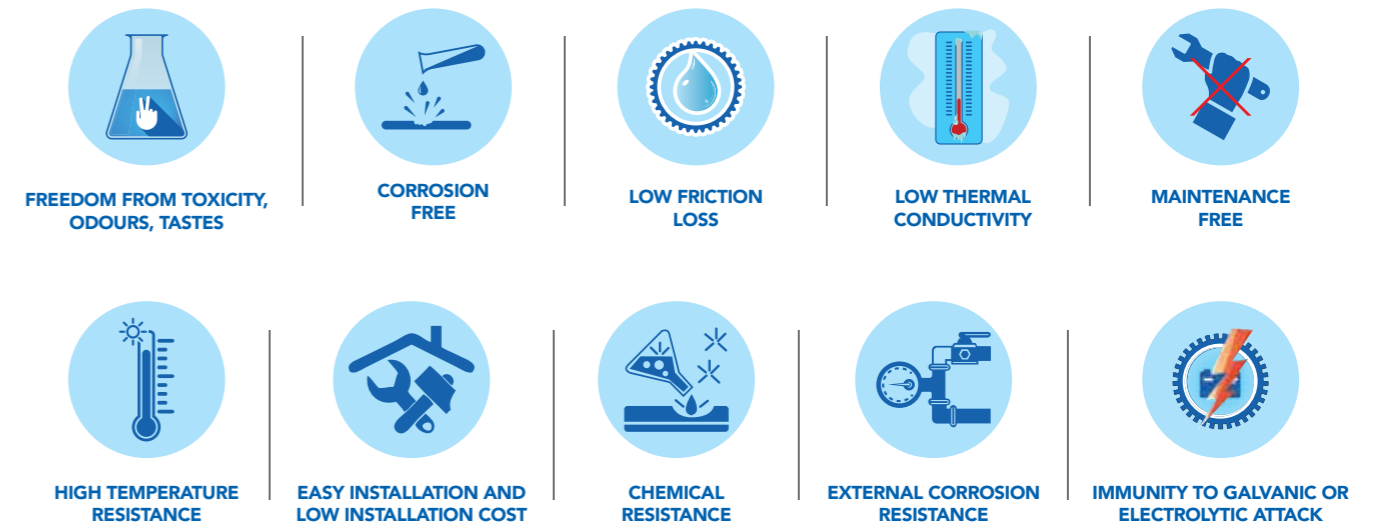
ASTRAL CHEM PRO industrial piping system can be used upto 93°C temperature (Intermittent up to 110°C) & pressure based on the pipe sizes. ASTRAL CHEM PRO CPVC industrial piping system is suitable for many industrial requirements like metal treating pump & raiser, Food & beverages, Industrial waste water, Chemical processing etc. ASTRAL POLY TECHNIK LIMITED is the only Indian company manufacturing industrial grade Chlorinated Polyvinyl Chloride (CPVC) Pipes of schedule 40 & 80 and fittings of schedule 80 conform to ASTM Standards ranging from ½"(15mm) to 12" (300mm). All ASTRAL CHEM PRO CPVC industrial pipes are produced from compound confirming to ASTM D1784.

Many chemicals encountered in the process industry aggressively corrode most metal equipment resulting in process leaks, flow restrictions and ultimately premature failure. In addition to metals there are other thermoplastics used in industry which get affected by these aggressive chemicals at elevated temperatures and pressures and lead to premature failure. Long Service life, minimum downtime and environmental compliance are critical to the success and growth of firms in the process industry. A challenging effort is required for the industry to achieve the successes where corrosion can decrease piping life, interrupt production and create potential environmental hazards. As a result, these industries often require process-piping systems those are made of materials that can withstand tough industrial environments. Ideally, this means a cost effective material that will resist corrosion eventually providing mechanical strength, safety and long lasting performance.

## WHY ASTRAL CHEM PRO?

- ASTRAL is pioneer in CPVC piping industry having more than 17 years of expertise in CPVC piping system in india.
- One of the most advanced CPVC industrial piping systems available globally.
- The Compound meets or exceeds the requirement of cell class 24448 against the standard cell class 23447
- Complete product range from ½" (15mm) to 12" (300mm) with wide range of fittings
- Provides special nonmetallic valves like Ball valve, Butterfly valve, Diaphragm valve, Non return valve. Available both in manual & actuated operational.
- Astral imparts complete knowledge of CPVC piping system including training, installation & after sales service support.
- Dedicated sales-force on industrial systems.

## ADVANTAGES



## GENERAL SPECIFICATIONS

### PRODUCT DESCRIPTION

ASTRAL CHEM PRO CPVC Industrial Systems are produced from specialty plastic compounds known as post-chlorinated polyvinyl chloride (CPVC). The compound meets cell class 24448 as defined by ASTM D1784 and have a design stress of 2000 psi and a maximum service temperature of 93°C.

### PRODUCT RANGE

**Pipe:** Pipe shall meet or exceed the requirements of ASTM F441 in Schedule 40 and 80 dimensions. Available in size range 15mm (½") to 300 mm (12").

**Fittings:** Fittings shall meet or exceed the requirements of ASTM F437 (Schedule 80 threaded) or ASTM F439 (Schedule 80 socket). Available in size range ½" to 12".

**Primer/Solvent Cement:** All socket type joints shall be made up employing primer and solvent cements that meet or exceed the requirements of ASTM F656 and ASTM F493. Both primer and solvent cement shall confirm with the requirements of NSF Standard 14. Only CPVC solvent cement and primer shall be used when making CPVC solvent cement joints.

