

CPVC (Chlorinated Polyvinyl Chloride) is a thermoplastic known for its superior heat and chemical resistance compared to standard PVC. Strong, durable, and versatile, it is widely used in demanding environments where higher performance is required.

What is CPVC?

CPVC is produced by chlorinating PVC resin, which enhances its ability to withstand heat and corrosion. It maintains the versatility of PVC while extending its working temperature and resistance to aggressive chemicals.

Common Applications

CPVC is a reliable choice for:

- Hot-and-cold water distribution systems
- Industrial piping and fittings
- Chemical handling equipment
- Fire sprinkler systems
- Durable profiles in high-temperature environments

Benefits

- 1. High heat resistance (up to ~200°F / 93°C)
- 2. Excellent chemical and corrosion 2. Higher cost compared to resistance
- 3. Strong mechanical integrity in high-temperature environments
- 4. Maintains rigidity and dimensional stability under stress
- 5. Compatible with solvent welding and other joining techniques

Limitations

- 1. Less flexible than other thermoplastics
- unmodified PVC
- 3. Can become brittle at very low temperatures
- 4. Requires proper handling and joining techniques to prevent stress cracking