

Geon™ CPVC Compounds for Molding and Extrusion Applications

Geon™ CPVC Compounds

Product Name	Colors	Processing	Typical Uses
Dry blend	Transparent and opaque	Extrusion	Pipe, profile, sheet, cellular (foam)
Pellets	Transparent and opaque	Extrusion Molding	Fittings, profiles, sheet Custom-molded products
Custom product formulations and colors are available			

Product Description

CPVC is a popular engineering material used in a variety of industrial applications where a high functional temperature and resistance to corrosive chemicals are desirable. These cost-effective compounds combine high heat distortion temperature, chemical resistance, flame retardancy and low smoke generation. Key performance properties are optimized through the selection of appropriate additives to meet certain regulatory and performance requirements.

Chemical Resistance: CPVC exhibits excellent resistance to salts and aliphatic hydrocarbons, and good resistance to acids and bases. It is immune to galvanic corrosion.

Flame Retardancy: CPVC has been approved for applications that must meet stringent smoke and flame standards. CPVC tends to self-extinguish when not in direct contact with a flame source.

Heat Resistance: CPVC can withstand corrosive water conditions at elevated temperatures, making it a popular choice for hot water piping systems in commercial and residential construction.

Key Characteristics

Geon™ CPVC compounds offer customers a wide variety of benefits, including:

- High heat distortion temperature (HDT 90°C to 110°C)
- Flame retardancy
- Low smoke generation
- Chemical resistance
- Use in molding and extrusion processes
- Custom transparent and opaque colors
- Agency listings specific to certain applications, including NSF and CSA (Canada). Other agency listings pending: UL, FM (Factory Mutual), LPCF (Loss Prevention Certification Board).



The PolyOne Advantage

PolyOne has the know-how and experience in polymer compounding to develop customized solutions that address specific performance needs. We have the capability to develop formulations, perform testing to demonstrate and substantiate physical properties and performance parameters, and then produce these new formulations with outstanding quality.

Many customers rely on PolyOne as a full-line provider because of our consistent, high-quality materials and the reliability of PolyOne brands. With Geon™ CPVC products, we extend our technological and commercial expertise to a product line offering high performance in applications requiring higher heat distortion temperatures, flame retardancy, chemical resistance and low smoke generation.

Markets and End-Use Applications

Geon CPVC compounds serve a wide range of markets and applications, including:

- Pipe and pipe fittings – wastewater pipe, pressure pipe (industrial and residential)
- Pools and spas
- Profiles for outdoor applications such as window components
- Custom profile extrusions
- Cellular (foamed) extrusions
- Custom-molded applications
- Electrical components
- Sheet applications requiring high flame and high temperature resistance

The combination of high heat distortion temperature, flammability and chemical resistance gives Geon CPVC its high performance.

For more information about Geon CPVC compounds, please see these additional reference materials:

Geon CPVC Molding Processing Guide

Geon CPVC Extrusion Processing Guide

Contact your PolyOne representative today to learn how we can help you meet your performance requirements. Please contact your nearest sales office for assistance in choosing the right solution for your needs.

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