

# CPVC Compound (Hot & Cold Water Systems) **HCM-WF201**

## 1. General Properties

HCM-WF201 is a compound for hot & cold water CPVC fittings. CPVC resin is blended with additives such as heat stabilizers and impact modifiers, then pelletized for use in injection molding machines to manufacture fittings. HCM-WF201 satisfies the ISO 15877-3 international standard.

HCM-WF201 has the following outstanding characteristics:

- ▶ Mechanical Properties (Tensile, Bending, Hydrostatic Pressure Endurance)
- ▶ Impact Strength at Low Temperatures
- ▶ Thermal Resistance (Vicat Softening Point, Heat Deflection Temperature)
- ▶ Processability (Outstanding Melt Flow, Steady Processing Conditions)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)

## 2. Applications

HCM-WF201 is an injection molding compound that can be used for the manufacture of fittings that require high thermal resistance and hydrostatic pressure endurance, such as potable hot and cold water fittings.

- ▶ Fittings for Hot & Cold Water (Thermal Resistance, Hydrostatic Pressure Endurance)
- ▶ Other molding applications requiring thermal resistance (Valves, etc.)

## 3. Pellet Properties (HCM-WF201)

Property	Unit	Typical Value	Test Method
Resin Chlorine Content	%	67.3 ± 0.5	Oxygen Flask
Compound Chlorine Content	%	> 57.3	Oxygen Flask
Compound Form	-	Pellet	-
Color	-	Off White, Ivory	-
Ash Content	%	< 6	ASTM D 5630
Melt Index	g/10min	15 ± 3	ASTM D 3364

#### **4. Physical Properties (HCM-WF201)**

<b>Property</b>	<b>Unit</b>	<b>Typical Value</b>	<b>Test Method</b>
Cell Classification	-	24447	ASTM D 1784
Density	g/cm <sup>3</sup>	1.50 ± 0.05	ASTM D 1505
Opacity	%	< 0.02	ASTM D 1746
Vicat Softening Temperature	°C	110 ± 3	ASTM D 1525
Tensile Strength	kg <sub>f</sub> /cm <sup>2</sup>	550 ± 30	ASTM D 638
Izod Impact Strength	kg·cm/cm	32 ± 5	ASTM D 256

#### **5. Storage, Packaging, and Safety**

##### **Storage**

HCM-WF201 should be stored in dry conditions at room temperatures below 25°C.

##### **Packaging**

Hanwha Solutions Corporation provides its customers with a product specific Material Safety Data Sheet (MSDS) that underlines potential health effects and safe handling, use, and transportation methods. Hanwha Solutions Corporation strongly encourages its customers to review the MSDS prior to material use. HCM-WF201 is normally supplied as a pellet in a 25kg paper bag with a polypropylene woven bag insert and polyethylene liner, or jumbo bag.

##### **Safety**

HCM-WF201 is not formulated to contain any hazardous or regulated materials such as lead, cadmium, mercury, and chromium compounds. No hazardous or regulated materials are used during the manufacturing process of this material.

#### **General Information**

The data and recommendations contained in this document represent the current state of our knowledge and serve only as a guide to our products and their potential applications. Therefore, no warranty of specific property mentioned herein, or of its suitability or fitness for a particular purpose, is implied. Further information and recommendations for processing can be obtained from our technical support staff and representatives.