

1. General Properties

HCM-FF203 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-FF203 presents excellent fire retardant characteristics.

HCM-FF203 has the following outstanding characteristics:

- ▶ Mechanical Properties (Tensile, Bending, Hydrostatic Pressure Endurance)
- ▶ Processability (Outstanding Melt Flow, Steady Processing Conditions)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)
- ▶ Flame Resistance (Oxygen Index)
- ▶ Impact Strength at Low Temperatures

2. Applications

HCM-FF203 is an injection molding compound that can be used for the manufacture of fittings that require high flame resistance and hydrostatic pressure endurance, such as fire sprinkler system fittings.

- ▶ Fittings for fire sprinkler (Flame Resistance, Hydrostatic Pressure Endurance)
- ▶ Other molding applications requiring thermal resistance (Valves, etc.)

3. Pellet Properties (HCM-FF203)

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	-	Orange	-
Ash Content	%	< 6	ASTM D5630
Melt Index	g/10min	13 ± 3	ASTM D3364

4. Physical Properties (HCM-FF203)

Property	Unit	Typical Value	Test Method
Density	g/cm ³	1.50 ± 0.05	ASTM D1505
Opacity	%	< 0.02	ASTM D1746
Tensile Strength	kgf/cm ²	550 ± 30	ASTM D638
Izod Impact Strength	kgf·cm/cm	30 ± 5	ASTM D256

CPVC Compound (Fire Sprinkler Systems)

5. Storage, Packaging, and Safety

Storage

HCM-FF203 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-FF203 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-FF203 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.