

1. General Properties

HCM-IF201 is a compound for CPVC industrial fittings. CPVC resin is blended with additives ideal for industrial purpose and environment especially, then pelletized for use in injection molding machines to manufacture durable fittings. HCM-IF201 satisfies the ISO 15877-3 international standard.

HCM-IF201 has the following outstanding characteristics:

- ▶ Chemical-Resistance (Inert to most mineral acid, aliphatic hydrocarbons, bases and salts)
- ▶ Mechanical Properties (Tensile, Hydrostatic Pressure Endurance, Impact Strength)
- ▶ Thermal Characteristics (Low thermal conductivity, Heat Deflection Temperature)
- ▶ Processability (Long-Term Heat Stability, Steady Processing Conditions)
- ▶ UV-Protective (Addition of Carbon black and Titanium dioxide)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)

2. Applications

HCM-IF201 is an injection molding compound that can be used for the manufacture of fittings that demand high thermal resistance, chemical resistance, hydrostatic pressure endurance and non-corrosive characteristics, such as industrial fittings.

- ▶ Fittings for industrial piping system (Production facilities, Chemical processing industry, Waste water treatment, Industrial manufacturing, Blending operations, Marine, etc.)
- ▶ Other molding applications requiring chemical, flame and corrosion resistance (Valves, Ducts, etc.)

3. Pellet Properties (HCM-IF201)

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	-	Gray	-
Ash Content	%	< 6	ASTM D 5630
Melt Index	g/10min	13 ± 3	ASTM D 3364

4. Physical Properties (HCM-IF201)

Property	Unit	Typical Value	Test Method
Cell Classification	-	24447	ASTM D 1784
Density	g/cm ³	1.50 ± 0.05	ASTM D 1505
Opacity	%	< 0.02	ASTM D 1746
Vicat Softening Temperature	°C	110 ± 3	ASTM D 1525
Burning rate	-	Self-extinguish	ASTM D635
Modulus of elasticity tensile	kg _f /cm ²	26500 ± 500	ASTM D 638
Tensile Strength	kg _f /cm ²	540 ± 30	ASTM D 638
Izod Impact Strength	kg·cm/cm	30 ± 5	ASTM D 256
Limited oxygen index	%	60	ASTM D2863-70

5. Storage, Packaging, and Safety

Storage

HCM-IF201 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-IF201 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-IF201 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.