Hanwha Solutions

CPVC Compound (Hot & Cold Water Systems) HCM-WP102

1. General Properties

HCM-WP102 is a compound for hot & cold water CPVC pressure pipes. CPVC resin is blended with additives such as heat stabilizers and impact modifiers for use in extruders to manufacture pipes. HCM-WP102 satisfies ISO 15877-1 and ISO 15877-2 international standards.

HCM-WP102 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 (Long-Term Heat Stability, Low Extrusion Load)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)

2. Applications

HCM-WP102 is an extrusion compound that can be used for the manufacture of pipes that require high thermal resistance and hydrostatic pressure endurance, such as potable hot and cold water pipes.

- ▶ Pressure Pipes for Hot & Cold Water (Thermal Resistance, Hydrostatic Pressure Endurance)
- ▶ Other non-plasticized products requiring thermal resistance (Flame/Thermal Resistant Plates, etc.)

3. Powder Properties (HCM-WP102)

Property	Unit	Typical Value	Test Method
Resin Chlorine Content	%	67.3 ± 0.5	Oxygen Flask
Compound Chlorine Content	%	> 57.3	Oxygen Flask
Compound Form	-	Powder	-
Color	-	Off White, Ivory	-
Bulk Density	g/cm³	0.62 ± 0.05	ASTM D 1895
Ash Content	%	< 6	ASTM D 5630

4. Physical Properties (HCM-WP102)

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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	114 ± 3	ASTM D 1525
Tensile Strength	kg_f/cm^2	550 ± 30	ASTM D 638
Izod Impact Strength	kg·cm/cm	32 ± 5	ASTM D 256

5. Storage, Packaging, and Safety

Storage

HCM-WP102 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-WP102 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-WP102 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.