

1. General Properties

HCM-WP103N 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-WP103N satisfies ISO 15877-1 and ISO 15877-2 international standards.

HCM-WP103N has the following outstanding characteristics:

- ▶ Mechanical Properties (Tensile, Bending, Hydrostatic Pressure Endurance)
- ▶ Thermal Resistance (Vicat Softening Point, Heat Deflection Temperature)
- ▶ Processability (Long-Term Heat Stability, Steady Processing Conditions)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)

2. Applications

HCM-WP103N 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-WP103N)

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/cm ³	0.62 ± 0.05	ASTM D 1895
Ash Content	%	< 5	ASTM D 5630

4. Physical Properties (HCM-WP103N)

Property	Unit	Typical Value	Test Method
Cell Classification	-	24447	ASTM D 1784
Density	g/cm ³	1.50 ± 0.05	ASTM D 1505
Opacity	%	Less than 0.02	ASTM D 1746
Vicat Softening Temperature	°C	115 ± 3	ASTM D 1525
Tensile Strength	kgf/cm ²	570 ± 30	ASTM D 638
Izod Impact Strength	kgf·cm/cm	32 ± 5	ASTM D 256

The information given herein and other otherwise provided to users is based on our general experience and, where applicable, on the results of tests. However, due to various factors that exist outside of our knowledge and control, which may affect the use of this product, users must rely on their own judgment for expected results. We do not accept liability for any injury, loss, or damage resulting from reliance upon this information.

5. Storage, Packaging, and Safety

Storage

HCM-WP103N should be stored in dry conditions at room temperatures below 25°C.

Packaging

Hanwha Chemical 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 Chemical Corporation strongly encourages its customers to review the MSDS prior to material use. HCM-WP103N 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-WP103N 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.