

### 1. General Properties

HCM-BW102 is a compound for Heat-Resisting profile. CPVC resin is blended with additives such as heat stabilizers and impact modifiers, then pelletized(or powder type) for use in extruders to manufacture profile. HCM-BW102 presents excellent fire retardant and heat-resisting characteristics.

HCM-BW102 has the following outstanding characteristics:

- ▶ Mechanical Properties (Tensile, Bending, Hydrostatic Pressure Endurance)
- ▶ Heat Resistance (Excellent heat-resisting property)
- ▶ Processability (Outstanding Melt Flow, Steady Processing Conditions)
- ▶ UV-Protective (Addition of pigment and UV Stabilizer)
- ▶ Flame Resistance (Low flame and smoke characteristics)
- ▶ Safety (Absence of Lead, Mercury, Cadmium, Phthalates, and other Hazardous Materials)

### 2. Applications

HCM-BW102 is an extrusion compound that can be used for the manufacture of profiles that require high heat and flame resistance, such as CPVC profile.

- ▶ Profiles for heat and flame resistant window or door
- ▶ Other molding applications requiring thermal resistance

### 3. Powder/Pellet Properties (HCM-BW102)

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/Pellet	-
Color	-	Black, White	-
Ash Content	%	< 6	ASTM D 5630
Bulk Density	g/cm <sup>3</sup>	0.62 ± 0.05	ASTM D1895
Melt Index	g/10min	7 ± 3	ASTM D 3364

### 4. Physical Properties (HCM-BW102)

Property	Unit	Typical Value	Test Method
Cell Classification	-	24447	ASTM D1784
Density	g/cm <sup>3</sup>	1.50 ± 0.05	ASTM D1505
Opacity	%	Less than 0.02	ASTM D1746
Burning rate	-	Self-extinguish	ASTM D635
Vicat Softening Temperature(1kgf)	°C	120 ± 3	ASTM D1525
Tensile Strength	kgf/cm <sup>2</sup>	550 ± 30	ASTM D638
Izod Impact Strength	kgf·cm/cm	27 ± 5	ASTM D256
Limited oxygen index	%	60	ASTM D2863-70

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-BW102 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-BW102 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-BW102 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.