



Product Data Sheet

Titanvene™ HD5070P

Pressure Pipe Applications

Titanvene™ HD5070P is a high density polyethylene designed for use in pressure pipe application where long term hydrostatic strength with high environmental stress crack resistance are required. Titanvene™ HD5070P offers balance of outstanding processing characteristic combined with excellent mechanical performances for pressure pipe system.

Applications

Titanvene™ HD5070P is designed for extrusion pipe applications where PE100 resin type is required. Titanvene™ HD5070P is suitable for use in small to large diameter of pressure pipe for the transport of fluid for industrial, rural, mining, sewage as well as water supply.

Recommended Processing Conditions ⁽¹⁾

Titanvene™ HD5070P can be easily processed on regular polyethylene extrusion machines at temperatures in the range of 200°C to 230°C.

Food Contact Compliance

Titanvene™ HD5070P can be used in food contact applications. Please contact your nearest PT. Titan Petrokimia Nusantara representative for more detail of food contact compliance statements for the specific grade.

General Properties	Value ⁽²⁾	Unit	Test Method
Melt Flow Rate (190°C/21.6 kg)	6.5	g/10 min	ISO 1133, Condition 7
Density ⁽¹⁾	947	kg/m ³	ISO 1183
Vicat Softening Point	127	°C	ISO 306
Melting Point	132	°C	ISO 3146, Method C

Mechanical Properties ⁽³⁾	Value ⁽²⁾	Unit	Test Method
Tensile Strength at Yield	25	MPa	ISO/R 527, Type 2 Speed C
Elongation at Break	1100	%	ISO/R 527, Type 2 Speed C
Charpy Impact Strength	20	kJ/m ²	ISO 179
Flexural Modulus	1000	MPa	ISO 178
Hardness (Shore D)	62		ISO 868, Type D
Brittleness Temperature	-75	°C	ASTM D746
ESCR Condition B, F50	>1000	Hours	ASTM D1693

(1) The optimum processing conditions can be different from one machine to the others, depend on the mold and part design.
(2) The values shown are typical values obtained by averaging a number of tests. Small divergences from the quoted figures may occur
(3) Measured on compression molded plaques.
(4) Environment Stress Cracking Resistance 10% Igepal CO-630

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