



Product Data Sheet

Titanvene™ HD5220GM

Milk Bottle Applications

Titanvene™ HD5220GM is a high density polyethylene designed for extrusion blow moulding and in particular for dairy product packaging. Titanvene™ HD5220GM is characterised by easy extrusion and processing, Titanvene™ HD5220GM has excellent organoleptic properties that do not significantly transfer taste or odour to the packaged product, good stress cracking resistance and stability for critical beverages and food packaging.

Applications

Titanvene™ HD5220GM is specialised for blow moulding items such as bottles/containers for:

- Milk and dairy products

- Fruit juice
- Beverages

Recommended Processing Conditions ⁽¹⁾

Titanvene™ HD5220GM can be easily processed on normal polyethylene blow moulding machines at temperatures in the range of 170°C to 200°C.

Food Contact Compliance

Titanvene™ HD5220GM 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/2.16 kg)	1.9	g/10 min	ISO 1133 Condition 4
Nominal Density	951	kg/m ³	ISO 1183 Method D
Vicat Softening Point	124	°C	ISO 306
Melting Point	131	°C	ISO 3146 Method C

Mechanical Properties ⁽³⁾	Value ⁽²⁾	Unit	Test Method
Tensile Stress at Yield	26	MPa	ISO/R 527 Type 2 Speed C
Elongation at Break	1800	%	ISO/R 527 Type 2 Speed C
Charpy Impact Strength	10	kJ/m ²	ISO 179 Type 1 Notch A
Flexural Modulus	1300	MPa	ISO 178
ESCR Condition B, F ₅₀ ⁽⁴⁾	40	F ₅₀ , hours	ASTM 1693

(1) The optimum processing conditions can be different from one machine to the others, depend on the mould 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 moulded plaques.
(4) Environment Stress Cracking Resistance 10% Igepal : CO-630

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