LOTTE CHEMICAL
TITAN

Product Data Sheet

Titanvene™ HD5120EA-B

Organoleptic Closure Applications

Titanvene™ **HD5120EA-B** is a high density polyethylene copolymer with a narrow molecular weight distribution, which has been specially developed for packaging of carbonated beverages and for other applications where very high environmental stress cracking resistance (ESCR) is required. Titanvene™ **HD5120EA-B** has excellent organoleptic properties that do not significantly transfer taste or odour to the packaged product. Titanvene™ **HD5120EA-B** is characterised by excellent impact strength and creep resistance.

Applications
Titanvene™ **HD5120EA-B** is designed for bottle caps of carbonated beverages or other closures where very high ESCR is required.

Recommended Processing Conditions (1)
Titanvene™ **HD5120EA-B** can be easily processed on normal polyethylene injection moulding machines at temperatures in the range of 200ºC to 240ºC.

Food Contact Compliance
Titanvene™ **HD5120EA-B** can be used in food contact applications. Please contact your nearest PT. Lotte Chemical Titan Nusantara representative for more detail of food contact compliance statements for the specific grade.

General Properties	Value (2)	Unit	Test Method
Melt Flow Rate (190ºC/2.16 kg)	2.5	g/10 min	ISO 1133 Condition 4
Nominal Density	0.954	g/cm^3	ISO 1183 Method D
Vicat Softening Point	126	ºC	ISO 306
Melting Point	131	ºC	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	2000	%	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
Hardness (Shore D)	66		ISO 868 Type D
ESCR Condition B, F_{50} (4)	40	Hours	ASTM D1693

(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 molded plaques.
(4) Environment Stress Cracking Resistance 10% Igepal : CO-630