LOTTE CHEMICAL TITAN

Product Data Sheet

Titanvene™ HD4801GA

Blow Moulding Applications

Titanvene™ **HD4801GA** is a hexene co-monomer high density polyethylene of high molecular weight designed for extrusion applications and in particular for large blow moulding containers with excellent impact strength and excellent stress cracking resistance. Titanvene™ **HD4801GA** is characterised by easy extrusion and processing, very low odour and fuming, excellent environmental stress cracking resistance with superior impact strength.

Applications

Titanvene™ **HD4801GA** is specialised for blow moulding items such as bottles/containers from 5 to 30 litres capacity for:

- Food products and households
- Toiletries
- Pharmaceuticals and personal products
- Industrial chemicals or oils

Other applications :

- Non-pressure pipe and conduits.
- Synthetic rattan

Recommended Processing Conditions (1)

Titanvene™ **HD4801GA** can be easily processed on normal polyethylene blow moulding machines at temperatures in the range of 170ºC to 210ºC.

Food Contact Compliance

Titanvene™ **HD4801GA** 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)	0.1	g/10 min	ISO 1133 Condition 4
Melt Flow Rate (190ºC/21.6 kg)	11	g/10 min	ISO 1133 Condition 7
Nominal Density	0.948	g/cm^3	ISO 1183 Method D
Vicat Softening Point	126	ºC	ISO 306
Melting Point	130	ºC	ISO 3146 Method C

Mechanical Properties (3)	Value (2)	Unit	Test Method
Tensile Stress at Yield	24	MPa	ISO/R 527 Type 2 Speed C
Elongation at Break	1300	%	ISO/R 527 Type 2 Speed C
Charpy Impact Strength	17	kJ/m^2	ISO 179 Type 1 Notch A
Flexural Modulus	1450	MPa	ISO 178
Hardness (Shore D)	61		ISO 868 Type D
ESCR Condition B, F_{50} (4)	600	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