

## Product Data Sheet

**PT. Lotte Chemical Titan Nusantara. (Formerly known as PT TITAN Petrokimia Nusantara)**  
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### Titanvene™ HD5002GA

#### Blow Moulding Applications

Titanvene™ HD5002GA is a high density polyethylene of medium molecular weight designed for extrusion applications and in particular for blow moulding. Titanvene™ HD5002GA is characterised by easy extrusion and processing, very low odour and fuming, high stress cracking resistance and good impact strength.

#### Applications

Titanvene™ HD5002GA is specialised for blow moulding items such as bottles/containers up to 10 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 <sup>(1)</sup>

Titanvene™ HD5002GA 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™ HD5002GA 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 <sup>(2)</sup>	Unit	Test Method
Melt Flow Rate (190°C/2.16 kg)	0.16	g/10 min	ISO 1133 Condition 4
Melt Flow Rate (190°C/21.6 kg)	15	g/10 min	ISO 1133 Condition 7
Nominal Density	0.950	g/cm <sup>3</sup>	ISO 1183 Method D
Vicat Softening Point	126	°C	ISO 306
Melting Point	131	°C	ISO 3146 Method C
Mechanical Properties <sup>(3)</sup>	Value <sup>(2)</sup>	Unit	Test Method
Tensile Stress at Yield	26	MPa	ISO/R 527 Type 2 Speed C
Elongation at Break	1400	%	ISO/R 527 Type 2 Speed C
Charpy Impact Strength	12	kJ/m <sup>2</sup>	ISO 179 Type 1 Notch A
Flexural Modulus	1500	MPa	ISO 178
Hardness (Shore D)	65		ISO 868 Type D
ESCR Condition B, F <sub>50</sub> <sup>(4)</sup>	200	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

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