

## Product Data Sheet

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# Titanvene™ HD5502GA

## Blow Moulding Applications

Titanvene™ HD5502GA is a high density polyethylene of medium molecular weight designed for extrusion applications and in particular for blow moulding. Titanvene™ HD5502GA is characterised by easy extrusion and processing, very low odour and fuming, high stress cracking resistance and good impact strength.

### Applications

Titanvene™ HD5502GA is specialised for blow moulding items such as bottles/containers up to 5 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™ HD5502GA 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™ HD5502GA 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) | 0.38                 | g/10 min          | ISO 1133 Condition 4 |
| Melt Flow Rate (190°C/21.6 kg) | 28                   | g/10 min          | ISO 1133 Condition 7 |
| Nominal Density                | 0.952                | g/cm <sup>3</sup> | ISO 1183 Method D    |
| Vicat Softening Point          | 127                  | °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                           | 11                   | 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> | 150                  | 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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