



Product Data Sheet

Titanvene™ HD5401GA

Blow Moulding Applications

Titanvene™ HD5401GA is a high density polyethylene of high molecular weight designed for extrusion applications and in particular for large blow moulding containers of good stress cracking resistance. Titanvene™ HD5401GA is characterised by easy extrusion and processing, very low odour and fuming, excellent environmental stress cracking resistance with superior impact strength.

Applications

Titanvene™ HD5401GA is specialised for blow moulding items such as bottles/containers from 5 to 150 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™ HD5401GA can be easily processed on normal polyethylene blow moulding machines at temperatures in the range of 170°C to 210°C.

Food Contact Compliance

Titanvene™ HD5401GA 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) | 0.1 | g/10 min | ISO 1133 Condition 4 |
| Melt Flow Rate (190°C/21.6 kg) | 11 | g/10 min | ISO 1133 Condition 7 |
| Nominal Density | 953 | kg/m ³ | ISO 1183 Method D |
| Vicat Softening Point | 127 | °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 | 1200 | % | ISO/R 527 Type 2 Speed C |
| Charpy Impact Strength | 15 | kJ/m ² | ISO 179 Type 1 Notch A |
| Flexural Modulus | 1400 | MPa | ISO 178 |
| Hardness (Shore D) | 65 | | ISO 868 Type D |
| ESCR Condition B, F ₅₀ | 400 | 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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