



Titanvene™ HM4560UA (Provisional)

Large Blow Moulding Container Applications

Titanvene™ HM4560UA is an ultra violet (UV) light stabilised high density polyethylene copolymer with a high molecular weight polyethylene grade supplied in pellet form for use in medium-large blow moulding applications. Titanvene™ HM4560UA is characterised by high environmental stress crack resistance, high impact strength, good rigidity and easy handling pellet form.

Applications

- Intermediate bulk containers.
- Agricultural containers

Recommended Processing Conditions ⁽¹⁾

Titanvene™ HM4560UA can be easily processed on normal polyethylene blow moulding machines at temperatures in the range of 180°C to 230°C.

Food Contact Compliance

Titanvene™ HM4560UA 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/21.6 kg) | 6.0 | g/10 min | ISO 1133 Condition 7 |
| Nominal Density | 945 | kg/m ³ | ISO 1183 Method D |
| Vicat Softening Point | 125 | °C | ASTM D 1525 |
| Melting Point | 130 | °C | ISO 3146 Method C |

| Mechanical Properties ⁽³⁾ | Value ⁽²⁾ | Unit | Test Method |
|--------------------------------------|----------------------|-------------------|--------------------------|
| Tensile Strength at Yield | 24 | MPa | ISO/R 527 Type 2 Speed C |
| Elongation at Break | 1100 | % | ISO/R 527 Type 2 Speed C |
| Charpy Impact Strength | 25 | kJ/m ² | ISO 179 Type 1 Notch A |
| Flexural Modulus | 1400 | MPa | ISO 178 |
| Hardness (Shore D) | 62 | | ISO 868 Type D |
| Brittleness Temperature | <-75 | °C | ASTM D746 |
| ESCR Condition B, F50 ⁽⁴⁾ | >1000 | F50, hours | ASTM 1693 |

(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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