

## Product Data Sheet

**PT. Lotte Chemical Titan Nusantara. (Formerly known as PT TITAN Petrokimia Nusantara)**  
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### Titanvene™ LL3550UA

#### Rotational Moulding Applications

Titanvene™ LL3550UA is a medium density polyethylene, which has been specially developed for manufacturing large containers. Titanvene™ LL3550UA offers excellent UV resistance (UV6) for outdoor exposure with high levels of UV light radiation where the use of inorganic pigments or carbon black is normally recommended.

#### Applications

Titanvene™ LL3550UA is designed for large rotational moulding containers, traffic cone and garbage bin.

#### Recommended Processing Conditions <sup>(1)</sup>

Titanvene™ LL3550UA can be easily processed on normal polyethylene rotational moulding machines at temperatures in the range of 180°C to 230°C.

#### Food Contact Compliance

Titanvene™ LL3550UA 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)                   | 5.0                  | g/10 min          | ISO 1133 Condition 4     |
| Nominal Density                                  | 0.933                | g/cm <sup>3</sup> | ISO 1183 Method D        |
| Vicat Softening Point                            | 115                  | °C                | ISO 306                  |
| Melting Point                                    | 124                  | °C                | ISO 3146 Method C        |
| Mechanical Properties <sup>(3)</sup>             | Value <sup>(2)</sup> | Unit              | Test Method              |
| Tensile Stress at Yield                          | 15                   | MPa               | ISO/R 527 Type 2 Speed C |
| Elongation at Break                              | 1500                 | %                 | ISO/R 527 Type 2 Speed C |
| Charpy Impact Strength                           | 24                   | kJ/m <sup>2</sup> | ISO 179 Type 1 Notch A   |
| Flexural Modulus                                 | 1000                 | MPa               | ISO 178                  |
| Hardness (Shore D)                               | 60                   |                   | ISO 868 Type D           |
| ESCR Condition B, F <sub>50</sub> <sup>(4)</sup> | 300                  | 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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