

## Terate<sup>®</sup> HT 5503

### Industry Leadership

For more than 35 years, INVISTA has been an innovative leader in the aromatic polyester polyols market. In this market, INVISTA is known for its Terate<sup>®</sup> brand polyols which exhibit improved flammability and physical properties, backed by expert technical support.

INVISTA offers a complete line of aromatic polyester polyols with a variety of functionalities and equivalent weights. This allows formulation flexibility in achieving the range of physical and flammability properties required of polyurethane and polyisocyanurate foams.

### Attributes

The innovative chemistry that forms the basis for the Terate<sup>®</sup> HT polyols platform retains the Terate<sup>®</sup> polyol burn performance in industry flammability testing, forming char with minimal shrinkage and high weight retention, while improving ease of processing during rigid foam production, and adhesion to various substrates commonly used in rigid polyurethane and polyisocyanurate foam products.

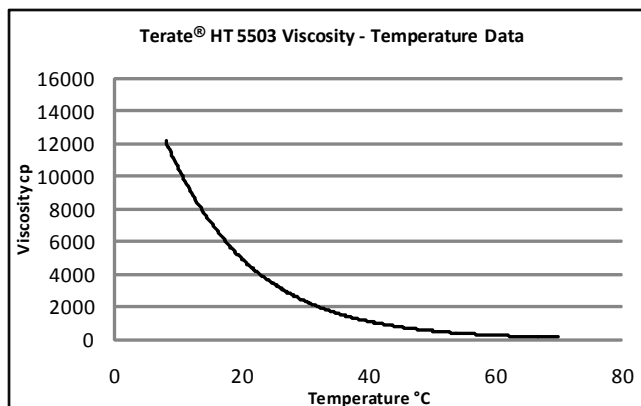
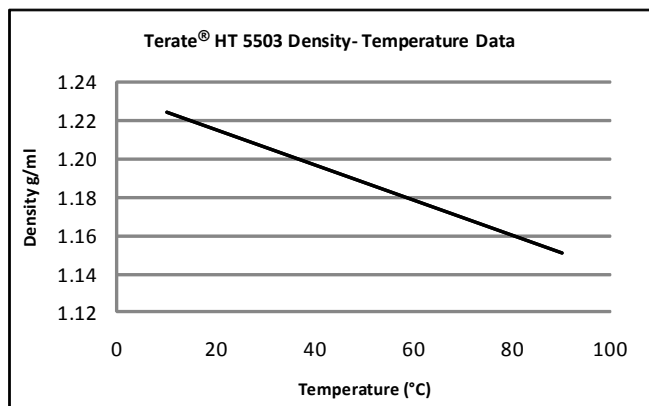
Terate<sup>®</sup> HT polyols can help reduce flame retardant loadings in polyurethane and polyisocyanurate rigid foam formulations, and can be used as a partial replacement of traditional polyether polyols with minor formulation adjustments. The unique nature of the Terate<sup>®</sup> HT series of polyols can afford foam formulators flexibility in their manufacturing processes in order to meet the needs of their customers.

### Applications

**Terate<sup>®</sup> HT 5503** polyol is an aromatic polyester polyol specifically formulated for hydrocarbon blown PIR laminate systems requiring a higher acid number. **Terate<sup>®</sup> HT 5503** polyols functionality and aromatic content enhance its flammability performance. When burned, polyisocyanurate and polyurethane foams containing **Terate<sup>®</sup> HT 5503** polyol form char with minimal shrinkage and allow for high weight retention. Aromaticity can help substantially reduce smoke development when the foam is burned, especially when used as a co-polyol in urethane systems.

### Properties and Specifications

|                                | Product Specifications | Typical Properties |
|--------------------------------|------------------------|--------------------|
| Hydroxyl Number, mg KOH/g      | 225 – 245              | 235                |
| Viscosity at 25°C, cps         | 2,000 – 5,000          | 3,500              |
| Acid Number, mg KOH/g          | 0.6 – 1.3              | 1.0                |
| Water Content, %               | ≤0.15%                 | 0.08%              |
| Specific Gravity at 25°C, g/ml |                        | 1.214              |
| Equivalent Weight              |                        | 239                |
| Functionality                  |                        | 2                  |



## Terate<sup>®</sup> HT 5503

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### Storage and Handling

Terate<sup>®</sup> HT 5503 polyol is a stable material which can be stored and handled in carbon steel, stainless steel, or fiberglass tanks or in tanks made from other conventional construction materials.

Storage temperatures should be kept below 60°C (140°F) to maintain product integrity. It is also recommended that storage vessels and process tanks be blanketed with dry air (min. -40°F bulb) or nitrogen to prevent uptake of atmospheric moisture.

The information given above is a guideline. Please see the MSDS for specific details on handling this product.

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### **For Samples and Information:**

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