

## Hifax X 1956 A

### Advanced Polyolefin

#### Product Description

Hifax X 1956 A is a reactor TPO (thermoplastic polyolefin) manufactured using the LyondellBasell's proprietary *Catalloy* process technology. This grade is primarily used in polyolefin-based compounds to improve mechanical properties and enhance moulded part appearance.

In particular, the product is used by our customers for providing tiger stripe resistance and improved aesthetics for unpainted automotive components.

The grade is available in natural pellet form.

For regulatory compliance information see Hifax X 1956 A Product Stewardship Bulletin (PSB).

#### Product Characteristics

<b>Status</b>	Commercial: Active
<b>Test Method used</b>	ISO
<b>Availability</b>	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
<b>Processing Methods</b>	Extrusion Compounding, Extrusion Flat-die, Calendering, Extrusion Thermoforming, Injection Molding
<b>Features</b>	Good Colorability, High Elongation, Good Flexibility, Low Flow, Good Impact Resistance, High Tensile Strength
<b>Typical Customer Applications</b>	Exterior Applications, Panels & Profiles, Polymer modifier, TPO Skins

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density	ISO 1183	0.89	g/cm <sup>3</sup>
Melt flow rate (MFR) (230°C/2.16Kg)	ISO 1133	1.2	g/10 min
<i>Note: Alternative test method is ASTM D 1238-01.</i>			
<b>Mechanical</b>			
Tensile Stress at Yield	ISO 527-1, -2	20	MPa
Tensile Strain at Break	ISO 527-1, -2	> 500	%
Tensile Strain at Yield	ISO 527-1, -2	> 10	%
Flexural modulus	ISO 178	850	MPa
<b>Impact</b>			
Notched izod impact strength	ISO 180		
(- 40°C, Type 1, Notch A)		5	kJ/m <sup>2</sup>
(23°C, Type 1, Notch A)		75	kJ/m <sup>2</sup>
(- 20 °C, Type 1, Notch A)		40	kJ/m <sup>2</sup>
<b>Hardness</b>			
Shore hardness (Shore D)	ISO 868	65	
<i>Note: 15 seconds</i>			
<b>Thermal</b>			
Vicat softening temperature (A50 (50 °C/h 10 N))	ISO 306	148	°C
Melting temperature	DSC	163	°C
<i>Note: ISO 11357-3</i>			

#### Additional Properties

Tear Strength (Graves, Die C, 50mm/min), ASTM D 624, Load/Width @ Max Load: 67 N/mm

#### Notes

Typical properties; not to be construed as specifications.

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LyondellBasell markets this product through the following entities:

- Equistar Chemicals, LP
- Basell Sales & Marketing Company B.V.
- Basell Asia Pacific Limited
- Basell International Trading FZE
- LyondellBasell Australia Pty Ltd

For the contact details of the LyondellBasell company selling this product in your country, please visit <http://www.lyb.com/>.

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This product(s) may not be used in:

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(ii) the manufacture of any of the following, without prior written approval by Seller for each specific product and application: (1) U.S. FDA Class II, Health Canada Class II or Class III, and/or European Union Class II Medical Devices; (2) film, overwrap and/or product packaging that is considered a part or component of one of the aforementioned Medical Devices; (3) packaging in direct contact with a pharmaceutical active ingredient and/or dosage form that is intended for inhalation, injection, intravenous, nasal, ophthalmic (eye), digestive, or topical (skin) administration; (4) tobacco related products and applications; (5) electronic cigarettes and similar devices; and (6) pressure pipe or fittings that are considered a part or component of a nuclear reactor.

(iii) Additionally, the product(s) may not be used in: (1) U.S. FDA Class III, Health Canada Class IV, and/or European Class III Medical Devices; (2) applications involving permanent implantation into the body; (3) life-sustaining medical applications; and (4) lead, asbestos or MTBE related applications.

All references to U.S. FDA, Health Canada, and European Union regulations include another country's equivalent regulatory classification.

Users should review the applicable Material Safety Data Sheet before handling the product.

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