

## Hifax CA 1133 A

### Advanced Polyolefin

#### Product Description

Hifax CA 1133 A, is a reactor TPO (thermoplastic polyolefin) manufactured using the LyondellBasell's proprietary *Catalloy* process technology. It is used for injection molding. Hifax CA1133 A is in particular suitable for high impact strength applications, even at low temperature. The product is characterised both by medium rigidity and a very good processability as well as and excellent paintability. The grade is available in natural pellet form. For regulatory compliance information see Hifax CA 1133 A Regulatory Affairs Product Stewardship Information/Certification Data Sheet (RAPIDS), which can be found on [www.polymers.lyondellbasell.com](http://www.polymers.lyondellbasell.com).

#### 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, Injection Molding
<b>Features</b>	High Impact Resistance, Low Temperature Impact Resistance, Paintable, Good Processability, Medium Rigidity
<b>Typical Customer Applications</b>	Exterior Applications, Impact modification

Typical Properties	Method	Value	Unit
<b>Physical</b>			
Density (Method A)	ISO 1183	0.89	g/cm <sup>3</sup>
Melt flow rate (MFR) (230 °C/ 2.16 kg)	ISO 1133	16	g/10 min
<b>Mechanical</b>			
Tensile Stress at Yield	ISO 527-1, -2	17	MPa
Tensile Strain at Break	ISO 527-1, -2	> 200	%
Flexural modulus	ISO 178	850	MPa
<b>Impact</b>			
Notched izod impact strength	ISO 180		
(23 °C, Type 1, Notch A)		No Break	
(- 20 °C, Type 1, Notch A)		9	kJ/m <sup>2</sup>
(-40 °C, Type 1, Notch A)		7	kJ/m <sup>2</sup>
<b>Hardness</b>			
Shore hardness (Shore D)	ISO 868	54	
<b>Thermal</b>			
Heat deflection temperature B (0.45 MPa) Unannealed	ISO 75B-1, -2	60	°C
Vicat softening temperature (A50 (50°C/h 10N))	ISO 306	122	°C

#### 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:

(i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I Medical Devices, without prior notification to Seller for each specific product and application; or

(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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