



## Hifax CA 721 GW

### Advanced Polyolefin

#### Product Description

Hifax CA 721 GW is a flexible polypropylene resin specifically developed for use by our customers in waterproofing applications. It is manufactured using the LyondellBasell's proprietary *Catalloy* process technology.

Hifax CA 721 GW membranes can be produced on slot die extruders, circular die (Blown film) extruders and on most of the calendering units (as used for PVC). Membranes can be reinforced and textured when required.

Hifax CA 721 GW is available in natural pellet form, pre-stabilised for long term exposure to elevated temperature and UV light.

Typical applications where our customers have specified Hifax CA 721 GW include drinking water containment and conveyance, fish pond liners, snow lagoons, tunnel linings, reservoir liners and floating covers, food related lining and UV exposed potable water applications. For regulatory compliance information see Hifax CA 721 GW 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, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America  |
| <b>Processing Methods</b>            | Extrusion Flat-die, Blown Film, Calendering  |
| <b>Features</b>                      | Good Chemical Resistance, High ESCR (Environmental Stress Cracking Resistance), Good Flexibility, Good Heat Seal, Heat Sealable, Low Temperature Impact Resistance, Ozone Resistant, Good Puncture Resistance, Non Toxic |
| <b>Typical Customer Applications</b> | Soil & Waste Pipe, Water management membranes  |

| Typical Properties | Method | Value | Unit |
|--------------------|--------|-------|------|
|--------------------|--------|-------|------|

This is a colour variant please see description for further information on where to obtain technical property details.

#### Physical

|                                     |          |      |                   |
|-------------------------------------|----------|------|-------------------|
| Density (Method A)                  | ISO 1183 | 0.88 | g/cm <sup>3</sup> |
| Melt flow rate (MFR) (230°C/2.16Kg) | ISO 1133 | 0.6  | g/10 min          |

#### Mechanical

|  |               |       |     |
|--|---------------|-------|-----|
| Tensile Stress at Yield (1 mm, 23 °C, 50 mm/min) | ISO 527-1, -2 | 5     | MPa |
| Tensile Strain at Break (1 mm, 23 °C, 50 mm/min) | ISO 527-1, -2 | > 800 | %   |
| Flexural modulus                                 | ISO 178       | 80    | MPa |

#### Impact

|   |         |          |  |
|---|---------|----------|--|
| Notched izod impact strength (0, Type 1, Notch A) | ISO 180 | No Break |  |
|---|---------|----------|--|

#### Hardness

|                          |         |    |  |
|--------------------------|---------|----|--|
| Shore hardness (Shore D) | ISO 868 | 30 |  |
|--------------------------|---------|----|--|

#### Thermal

|  |         |    |  |
|--|---------|----|--|
| Vicat softening temperature (A50 (50°C/h 10N)) | ISO 306 | 56 |  |
|--|---------|----|--|

#### Additional Properties

Melting Temperature, ISO 11357-3: 140 to 150°C  
Tear Resistance, ASTM D1004 C, 1 mm sheet: 80 N/mm  
Multi-axial Burst Stress, ASTM D5617, 1 mm sheet: >150%  
Critical Cone Height, GR1/GM3, 1 mm sheet: >100 mm  
Environmental Stress Cracking, ASTM D5397, 70°C: >1000 hr  
Xenon Arc Weathering, DIN 53387 1AX, 1 mm black/white sheets: >10000 hr  
Ozone Resistance, ASTM D2137: No Crack  
Resistance to Microorganisms, DIN 53739: Not Sensitive  
Resistance to Root Penetration, FLL Test: Resistant  
Ductile/Fragile transition temperature, Internal test method, -55°C

#### Notes

Typical properties; not to be construed as specifications