



**GAIL (India) Ltd.**  
(A Govt. of India Undertaking)  
**Petrochemicals Marketing**

## MF18A010U

### Metallocene Linear Low Density Polyethylene Resin

#### Product Description and Typical Applications:

MF18A010U is a metallocene ethylene–hexene copolymer, without slip and anti-block. Films made of MF18A010U grade have outstanding tensile, impact strength and puncture resistance. These superior properties together with excellent draw down make this a versatile polymer especially for multilayer blown film applications, in lamination films, agriculture, overwrap film, heavy-duty bags, barrier food packaging, and non-food packaging film etc. The material conforms to natural resin designation IS 7328-2H-FBE-BXDA of IS 7328:2020 and optimally stabilized with antioxidants and processing aid.

Property	Values*	Unit	Test Method
<b>Resin Properties</b>			
Melt Flow Index (I <sub>2</sub> )	1.0	g/10min	ASTM D1238
Density @ 23°C	0.918	g/cc	ASTM D1505
Peak Melting Temp	119	°C	DSC Method
<b>Film Properties</b>			
Tensile Strength @ Break (MD/TD)	500/450	kg/cm <sup>2</sup>	ASTM D882
Elongation @ Break (MD/TD)	550/650	%	ASTM D882
Tear Strength (MD/TD)	10/15	g/mic	ASTM D1922
Dart Impact Strength	17	g/mic	ASTM D1709
Haze	16	%	ASTM D1003
Gloss (45°)	50	-	ASTM D2457

\* Film properties have been measured on a 40 µm thick film.

#### Processing Guidelines:

Barrel temperature: 185 - 210°C  
Blow up ratio: 2.0 to 2.5  
Die gap: 1.8 to 2.2

#### Regulatory Information:

Certificate is available on request.

#### Packaging & Storage:

MF18A010U is available in natural colour, pellet form in 25 kg woven sacks. The product should be stored in dry conditions at temperature below 50°C and protected from UV light.

*For any technical assistance contact:*

#### GAIL Polymer Technology Centre, GAIL (India) Limited

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The information, data and suggestions contained herein are to the best of our knowledge accurate and reliable. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user specific application.