

# HANWHA

# M2010EN

## Metallocene LLDPE

Agricultural Film, Blown Film

**MELT INDEX**  
**DENSITY**

**1.0**  
**0.918**

HANWHA mLLDPE M2010EN is manufactured by Unipol process and designed for general purpose and agricultural film. mLLDPE M2010EN has well balanced property of mechanical property, processability and optical property

This product complies with U.S. FDA regulation 21 CFR 177.1520 (c) 3.1.a.

### ▣ Outstanding Properties

Mechanical Property  
Optical Property  
Low Temperature Sealing Property  
Processability

### ▣ Processing Conditions

Melt Temperature : 150 ~ 190 °C  
Blow-up Ratio : 2 ~ 3  
Optimum Gage Range : 0.03 ~ 0.1 mm

### ▣ Additives

Antioxidant, Processing Aid

### ▣ Physical Properties

Physical Properties	Unit	Test Method	Value
Melt Index	g/10min	ASTM D1238	1.0
Density	g/cc	ASTM D1505	0.918
Vicat Softening Point	°C	ASTM D1525	94
Melting Point	°C	HCC Method	113
Tensile Strength at Break	kg/cm <sup>2</sup>	ASTM D638	440
Elongation at Break	%	ASTM D638	750
Brittleness Temperature, F <sub>0</sub>	°C	ASTM D746	< -76
Film Properties	Unit	Test Method	Value
Film Thickness	mm	HCC Method	0.05
Tensile Strength at Break	kg/cm <sup>2</sup>	ASTM D882	MD 440
			TD 320
Elongation at Break	%	ASTM D882	MD 400
			TD 520
Elmendorf Tear Strength	Kg/cm	ASTM D1004	MD 470
			TD 860
Dart Impact Strength	g	ASTM D1709	490
Haze	%	ASTM D1003	8

1. These are typical properties : not to be construed as specification.

2. The value for this property is dependent on part geometry and fabrication conditions.

