

Agriculture Greenhouse Film Engineered Compound

Applications

Agrichem is compound to meet the large lay-flat film requirements of agriculture greenhouse film. This resin offers an outstanding balance between processing and film properties, including tensile, impact and puncture. Easier processing and excellent properties lead to significant high pressure LDPE replacement in many applications, yet with superior drawdown and enhanced toughness. Agrichem resins formulated with UV absorber, Anti block, Anti-static, Thermal stabilizer and processing aid additives.

Physical Properties

Item	Typical Value	Unit	Test Method
Melt Flow Index (190°C/2.16kg)	0.9	g/10min	ISO 1133
Melt Flow Index (190°C/5kg)	---	g/10min	ISO 1133
Melting Point (DSC)	110.52	°C	ISO 3146
Ash Content	---	% wt.	ASTM D5630
Density	0.935	gr/cm ³	ASTM D792
Tc (DSC)	108	°C	ISO 3146
Heat Of Fusion (DSC)	69	j/gr	ISO 3146
Oxidative Induction Time (OIT)	>40	min	ASTM D 3895

Film Properties

Item	Typical Value	Unit	Test Method
Tensile Strength at Yield (MD)	10.8	MPa	ASTM D882
Tensile Strength at Yield (TD)	12	MPa	ASTM D882
Tensile Strength at Break (MD)	55	MPa	ASTM D882
Tensile Strength at Break (TD)	58	MPa	ASTM D882
Elongation at Break (MD)	510	%	ASTM D882
Elongation at Break (TD)	680	%	ASTM D882
Dart Drop Impact	210	gr	ASTM D1709A

❖ **General**

Agrichem

- Recyclable
- Downgauging opportunities of up to 20% that result in raw material savings, lower film inventory, reduced transportation costs and lower unit costs
- Improved toughness and dart impact resistance for less film damage during harsh weather and reduced labor costs for cladding
- Enhanced optical properties for faster-rising greenhouse temperatures, leading to increased productivity and earlier selling of product
- Sourcing simplicity to avoid blending complexity and errors, reduce resin inventory costs and eliminate or reduce the use of LDPE

❖ **Packaging**

Agrichem is supplied in regular pellet form packed in 25kg bags. It should be stored in a dry place