



## L5005

Alathon®

### High Density Polyethylene HMW Film Grade Melt Index 0.057 Density 0.949

Applications ALATHON L5005 is a high molecular weight high density copolymer that provides broad bimodal molecular weight distribution, high stiffness and good heat seal response and strength. Typical applications include merchandise bags, grocery sacks, trash can liners, produce bags and roll stock.

Regulatory<br/>StatusL5005 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520.This regulation allows the use of this olefin polymer in "...articles or components of articles<br/>intended for use in contact with food. " Specific limitations or conditions of use may apply. Contact<br/>your Equistar sales representative for more information.

# Processing<br/>TechniquesSpecific recommendations for processing L5005 can only be made when the processing conditions,<br/>equipment and end use are known. For further suggestions please contact your Equistar sales<br/>representative.

#### Typical Properties

	Nominal		ASTM
Property	Value	Units	Test Method
Melt Index	0.057	g/10 min	D 1238
Density	0.949	g/cc	D 1505
Total Energy Dart Drop	2.05	ft-lbs/mil	D 4272
Elmendorf Tear Strength, MD (TD)	14 (35)	g	D 1922
Tensile Strength @ Yield, MD (TD)	3,800 (3,400)	psi	D 882
Tensile Strength @ Break, MD (TD)	8,500 (5,000)	psi	D 822
Elongation @ Break, MD (TD)	300 (420)	%	D 882
Secant Modulus, MD (TD)	115,000 (140,000)	psi	D 882

### **Typical Process Condition Ranges:**

BUR=3.5-4.5:1; Neck Height=6-9 Die Diameters; Die Gap (nominal), in.=0.040-0.050; Tower Height=Relatively Short; Output, Lb/Hr/In of Die Circumference=10-12; Melt Temperature - 390-420°F (199-216°C)

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