## FILM GRADES



Tensile Strength @ break							Low Bensity Follycthylene		
Density @ 23°C	PROPERTIES	TEST METHOD	UNIT	FA 0234	FD 0270	FD 0274	FD 0374	FD0474	FD 0574
Melt Flow Index	POLYMER PROPERTIES								
Vicat Softening Point	Density @ 23°C	ASTM D-1505	g/cm <sup>3</sup>	0.920	0.923	0.923	0.922	0.923	0.922
Crystalline Melting Point	Melt Flow Index	ASTM D-1238	g/10 min.	1.8	2.4	2.4	3.5	4.0	5.0
ADDITIVES	Vicat Softening Point	ASTM D-1525	٥C	94	94	94	93	93	92
Antioxidant   Internal Method   Internal Metho	Crystalline Melting Point	ASTM E- 794	٥C	108	111	111	109	112	109
Slip Agent	ADDITIVES								
Antiblocking	Antioxidant	Internal Method	level	Present	-	Present	Present	Present	Present
FILM PROPERTIES	Slip Agent	Internal Method	level	Medium	-	Medium	Medium	Medium	Medium
Max	Antiblocking	Internal Method	level	Medium	-	High	High	High	High
No.	FILM PROPERTIES								
Haze	Recommended Thickness		μm	30 - 100	25 - 100	25 - 100	20 - 100	15 - 100	15 - 100
Signature   Strength	OPTICAL PROPERTIES								
Clarity ASTM D-1746 % 50 85 85 70 90 75  MECHANICAL PROPERTIES  Tensile Strength @ yield ASTM D-882 MPa MD/TD : 14/11 MD/TD : 12/10 MD/TD : 12/10 MD/TD : 15/11 MD/TD : 11/1 MD/TD : 12/10 MD/TD : 15/11 MD/TD : 11/1 MD/TD : 11/1 MD/TD : 12/10 MD/TD : 18/15 MD/TD : 17/1 MD/TD : 18/15 MD/TD : 18/15 MD/TD : 17/1 MD/TD : 18/15 MD/TD : 18/15 MD/TD : 17/1 MD/TD : 18/15 MD/TD : 18/15 MD/TD : 17/1 MD/TD : 18/15 MD/TD : 18/1	Haze	ASTM D-1003	%	10	6.5	6.5	8	6	7
MECHANICAL PROPERTIES  Tensile Strength @ yield	Gloss (@ 45°)	ASTM D-2457	gu	55		75	65	80	75
Tensile Strength @ yield ASTM D-882 MPa MD/TD: 14/11 MD/TD: 12/11 MD/TD: 12/10 MD/TD: 15/11 MD/TD: 15/11 MD/TD: 11/1 MD/TD: 15/11 MD/TD: 11/1 MD/TD: 15/11 MD/TD: 15/	Clarity	ASTM D-1746	%	50	85	85	70	90	75
Tensile Strength @ break	MECHANICAL PROPERTIES								
Elongation @ break	Tensile Strength @ yield	ASTM D-882	MPa	MD/TD : 14/11	MD/TD:12/11	MD/TD : 14/11	MD/TD : 12/10	MD/TD : 15/11	MD/TD : 11/12
Impact Strength, F50	Tensile Strength @ break	ASTM D-882	MPa	MD/TD : 22/20	MD/TD : 22/20	MD/TD : 22/21	MD/TD : 19/21	MD/TD : 18/15	MD/TD : 17/16
Coefficient of Friction  ASTM D-1894  O.10  O.45  O.10  O.99  O.12  O.09  PROPERTIES  O.10  O.99  O.12  O.09  O.12  O.09  Properties  Good balance of transparency and strength Good shrink properties  Good stretchability  Good stretchability  O.10  O.45  O.10  O.09  O.12  O.09  Excellent clarity Excellent draw down  Overy good  Ove	Elongation @ break	ASTM D-882	%	MD/TD: 400/500	MD/TD:550/600	MD/TD: 470/570	MD/TD:450/550	MD/TD : 400/550	MD/TD : 450/550
PROPERTIES  **Good mechanical properties* **Good optical properties* **Good stretchability*  **Thin strensperent film*  **Food packaging*  **Display film*  **Good balance of transparency and strength and clarity  **Excellent draw down  **Excellent draw do	Impact Strength, F50		g	135	110	110	130	100	120
PROPERTIES  PROPERTIES  Good optical properties Good stretchability Good stretchability Foamed products Mulch film Blister film  Plications  Properties  Transparency and strength Good optical properties Foamed products Lamination film  Thin transperent film Foamed products Foamed products Lamination film  Thin transperent film Foamed products Foamed products Lamination film Foamed products Lamination film  Thin transperent film Foamed products Foamed products Lamination film Foamed products Lamination film Foamed products Foamed products Lamination film Foamed products Foamed products Foamed products Foamed products Foamed products Lamination film Foamed products Foamed product	Coefficient of Friction	ASTM D-1894		0.10	0.45	0.10	0.09	0.12	0.09
hags Foamed products Mulch film Blister film  Blister film  Foamed products  Lamination film  Foamed products  Lamination film  Foamed products  Food packaging  Food packaging  High clarity bags  Lamination film  Lamination film  Display film  Garment & Garment & Pood packaging  High clarity bags  Lamination film  Display film  Food packaging  Clothing  Lamination film  Food packaging	PROPERTIES			properties • Good optical properties	transparency and strength  • Good shrink		transparency • Very good	• Excellent draw	Excellent draw
	APPLICATIONS			bags • Foamed products • Mulch film	• Foamed products	film  • Food packaging  • High clarity bags	Display film     Garment &     news-paper	packaging:  - Flowers  - Clothing  - Frozen food  - Diary products  • Display film	- Stationary - Clothing

(The above properties are measured on blown film of 50 micron @ 2.5 BUR)

Note: The values given in this sheet are the results of tests carried out in accordance with standard test procedure. They are given as an indication to enable customers to make the best of our products, but must be considered as average values provided without any undertaking on our part.