ARCEL[®] for a durable and resilient shipping solution

The strength of PS and the flexibility of PE to minimize costs and damage rates.

Property	Test Method	Units	ARCEL® ULV Resin									
Density	ASTM-D3575	PCF	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50
		G/L	24	28	32	40	48	56	64	72	80	88
Compressive Strength 10% Strain	ASTM-D3575	PSI	21	26	30	40	50	60	71	83	94	107
Compressive Strength 25% Strain	ASTM-D3575	PSI	26	31	36	47	59	71	83	96	110	124
Compressive Strength 50% Strain	ASTM-D3575	PSI	36	41	47	60	74	88	104	120	137	155
Compressive Strength 75% Strain	ASTM-D3575	PSI	74	84	94	116	140	167	195	225	258	293
Tensile Strength at Break	ASTM-D3575	PSI	44.4	52.9	60.3	72.6	82.6	91.1	98.5	105	110.8	116.0
Tear Strength at Max Load	ASTM-D3575	LB/IN	10.4	12.6	14.5	17.7	20.3	22.5	24.4	26.1	27.6	29.0
Flexural Stress at 5% Strain	ASTM-C2O3	PSI	37.5	47.5	57.0	74.2	89.2	101.9	112.3	120.5	126.5	130.1
Flexural Stress at Max Load	ASTM-C2O3	PSI	41.3	51.2	60.7	78.1	93.5	106.9	118.3	127.6	134.9	140.2
Flexural Strain at Max Load	ASTM-C2O3	%	10.2	9.9	9.6	9.0	8.4	7.8	7.3	6.7	6.1	5.5
Puncture, Max Load	ASTM-D3763	LBF	47	56	65	83	101	119	137	155	173	190
Burn Rate	FMVSS302	MM/MIN	103.6	91.3	80.2	68.2	58.8	51.8	46.5	42.2	38.7	35.8
Thermal Resistivity	ASTM-C518	FFT^2HR/ BTU IN	3.87	3.92	3.97	4.01	4.01	3.97	3.90	3.82	3.73	3.64

With less packaging material required than EPS, ARCEL[®] lowers costs by allowing creation of a smaller cube size outer carton for a smaller dimensional weight when shipping via eCommerce.

ARCEL ULV combines 80% polystyrene and 20% polyethylene, which is then expanded with 5.5% pentane and has a minimum finished part density of 1.35# pcf when molded. This combination forms into a tough, durable, and flexible foam that can be fabricated or molded into complex shapes which helps keep packaging costs and damage rates low. Available from all EFP facilities.

ARCEL® Features

- Better Pallet Utilization
- Multiple Impact (High Value)
- Reusable
- Recyclable
- Dimensional Stability
- Solvent Resistance
- Non-Abrasive
- Eliminate Fracture/ Dusting
- Sustainability
- Natural White Color



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