



## Cycolac\* Resin LSA

**Americas: COMMERCIAL** 

ABS, extrusion grade. Superior toughness, high gloss, good stress cracking/ chemical resistance and excellent forming characteristics. Boat, caravan.

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	35	MPa	ASTM D 638
Tensile Modulus, 5 mm/min	1790	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	58	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1790	MPa	ASTM D 790
Hardness, Rockwell R	94	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	453	J/m	ASTM D 256
Izod Impact, notched, -40°C	133	J/m	ASTM D 256
Falling Dart Impact, 23°C	40	J	SABIC Method
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	95	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.08E-04	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.02	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.8	%	SABIC Method
Melt Flow Rate, 230°C/3.8 kgf	1	g/10 min	ASTM D 1238
OPTICAL	Value	Unit	Standard
Gloss, untextured, 60 deg (sheet)	90	-	ASTM D 523

Source GMD, last updated:12/29/1999

## **Processing**

• Recommend initial lower temperatures settings to avoid material degradation/hang-up in die.

Parameter		
Sheet Extrusion	Value	Unit
Drying Temperature	80 - 95	°C
Drying Time	4	hrs
Maximum Moisture Content	0 - 0.02	%
Melt Temperature	215 - 260	°C
Barrel - Zone 1 Temperature	170 - 200	°C
Barrel - Zone 2 Temperature	180 - 220	°C
Barrel - Zone 3 Temperature	190 - 225	°C
Barrel - Zone 4 Temperature	200 - 240	°C
Adapter Temperature	205 - 250	°C
Die Temperature	205 - 250	°C
Roll Stack Temp - Top	90 - 95	°C
Roll Stack Temp - Middle	95 - 105	°C
Roll Stack Temp - Bottom	100 - 105	°C

Source GMD, last updated:12/29/1999

• Purge material from extruder prior to shutdown.

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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