

Applications

- Machined prototypes
- Structural components
- Support blocks
- Housings
- Covers

Advantages

- Excellent impact resistance
- Good machinability
- Excellent aesthetic qualities
- Easy to paint and glue
- Good strength and stiffness
- Low cost

Performance Characteristics

High Impact. Strength. FDA Compliant

Grades

- Machine Grade. FDA compliant (natural and black)
- Machine grade. non-FDA (natural and black)
- Flame retardant grade (natural and black)
- Static Dissipative (Black. Natural (beige). Semitransparent)

NOTE: Several grades of this material are available. For additional information regarding this plastic, contact your Emco Industrial Plastics representative or call (800) 292-9906.

MILSpecs

MIL-P-19904

ABS

ABS, Machine Grade

[Acrylonitrile Butadiene Styrene, Machine Grade]

ABS is an economical engineering plastic that is easy to machine and fabricate. ABS is an ideal material for structural applications when impact resistance, strength, and stiffness are required. It is widely used for machining pre-production prototypes since it has excellent dimensional stability and is easy to paint and glue.

Brand Names

Absylux®, Cyclocac®, Ensipur®, Susta ABS

Emco Industrial Plastics doesn't claim to represent all of the manufacturers or trade name products listed. This list is intended as a guide of typical materials available for purchase from Emco Industrial Plastics, Inc. For additional information, contact an Emco Industrial Plastics representative at (800) 292-9906.

Availability

TYPE	SIZE	LENGTH	COLOR
Sheet	1/4" - 6" TH	Standard 12" x 48"; 24" x 48", 48" x 96"; CTS	Natural, Black
Rod	1/4" - 6" DIA	Standard 1/4" - 2" x 8'; 2-1/4" - 6" x 4'; CTS	Natural, Black
Tube	CUSTOM		Custom
Film	CUSTOM		Custom

Give us your cut-to-size dimensions. We will precision-cut these plastics to your exact size. Additional sizes and colors available upon request.

Properties

PHYSICAL PROPERTIES	UNITS	ASTM	RESULTS
Density	lb/in ³	D792	0.38
Water Absorption, 24 hrs	%	D570	0.3
MECHANICAL PROPERTIES	UNITS	ASTM	RESULTS
Tensile Strength @yield	psi	D638	4.1
Tensile Modulus	psi	D638	294
Tensile Elongation @Break	%	D638	32
Flexural Strength	psi	D790	9.1
Flexural Modulus	psi	D790	304
Hardness, Rockwell R		D785	102
IZOD Impact Strength Notched	ft-lb/in	D256	7.7
THERMAL PROPERTIES	UNITS	ASTM	RESULTS
Coefficient of Linear Thermal Expansion	(x 10 ⁻⁵ in./in./°F)	D256	5.6
Heat Deflection Temp at 66 psi	°F	D648	200
Heat Deflection Temp at 264 psi	°F		177

NOTE: The property values presented above are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.