

Lightweight and strong, Toyolac® is the material for all seasons.

Toyolac® is an Acrylonitrile Butadiene Styrene (ABS) which gives an ideal balance between rigidity and impact strength.

Typical Toyolac® Applications

- power tools ● mirror housings ● fan impellers
- radios ● instrument panels ● horse riding safety helmets
- ear protectors ● telephones ● table ware ● computer housings
- automotive interior trim ● medical equipment housings

Toyolac® Standard Grades

Good impact strength at a wide range of temperatures

- Excellent toughness
- Good repeated impact strength
- Dimensional stability with temperature
- Low moisture absorption
- Good elongation at yield

Toyolac® Transparent Grades

Tough yet transparent, strong yet easy to process

- Very high clarity values for an ABS resin
- Low haze values
- Very low mould shrinkage values
- Retention of impact values with temperature

Toyolac® Specialities

- Extreme impact grades
- High flow grades
- Specific extrusion grades
- Glass fibre reinforced grades – up to 30%
- Metal plating grades
- High gloss grades
- High heat grades

Typical Toyolac[®] Properties

Properties	Light Transmission	Haze	Tensile Yield Strength	HDT	Notched Izod Impact Strength	Elongation at Break
Standard	ASTM D1003	ASTM D1003	ASTM D638	ASTM D648	ASTM D256-A	ASTM D638
Conditions	3.2mm	3.2mm	23°C	1.8MPa	3.2mm	23°C
Units	%	%	Kg/cm ²	°C	Kg.cm/cm	%
T 100 General Purpose	N/A	N/A	440	91	22	20
T 300 High Impact	N/A	N/A	370	88	29	20
T 700 High Gloss	N/A	N/A	420	90	18	15
T 920 Transparent	89	4	410	87	13	30

Toyolac[®] Processing & Handling Guide

Grade	Melt Temp	Barrel Temperatures				Mould Temp	Screw Speed	Back Pressure	Drying Temp	Drying Time
		Rear	Middle	Front	Nozzle					
	°C	°C	°C	°C	°C	°C	m/sec	Bar	°C	Hrs
General unfilled	220 ~ 250	160 ~ 180	180 ~ 210	210 ~ 250	220 ~ 240	40 ~ 60	0.6	5 ~ 15	80	3

* This should only be used as a guide as part geometry, thickness, processing temperatures and rates will affect final cycle conditions

Purging

When a break in production occurs it is advisable to empty the cylinder. High viscosity Acrylic is the best material for purging out ABS. Natural ABS, PS or SAN can also be used.

Recycling / Re-grind

Up to 20% of re-grind can be added with virgin material. For optimum mechanical performance and optimum clarity with clear grades, no re-grind should be added.

Colouring

The use of ABS based masterbatches is recommended, apply back pressure to disperse colour. For special colour effects contact Distrupol Colour.

Storage & Handling

If left exposed will absorb moisture and may require more extensive drying.

Toyolac[®] is a Toray registered trademark

Please refer to the individual processing guides and Material Safety Data Sheets for each grade prior to usage.

**Full colour-matching service available.
Custom coloured compounds on
quantities of 100kg upward.**

