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**ABN 20 101 181 793**

**ACN 101 181 793**

- Sheet Plastics
- Cut to size & shape
- CNC Router cutting
- Fabrication
- Vacuum Forming
- Boat Screens & windows
- Signs & Displays
- Engineering Plastics
- Ecoscreen Plastic Lattice
- C/S Acrovyn
- Bld/Lic RL155051

updated:1/8/05

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## **ABS TECHNICAL DATA AND INFORMATION SHEET**

ABS combines toughness and rigidity with chemical, stress-cracking, and creep resistance. Extruded ABS sheet can be easily thermoformed giving excellent mould detail with most conventional equipment. ABS is easily machined and may be bored, turned, drilled, milled, sawed, die-cut, routed and sheared using high-speed carbide-tipped tools. ABS can also be filed, sanded, ground, buffed and polished.

### **COMMON APPLICATIONS:**

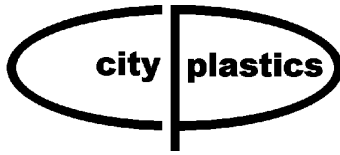
Automotive interior and exterior trim, lab equipment, luggage, office accessories, machine parts.

### **SHEET SIZES:**

City Plastics carry a range of sizes, thicknesses, colours and textures in stock. Sheet material can be custom manufactured to your requirements, subject to minimum quantities.

### **PROPERTIES:**

High rigidity and impact strength. Excellent abrasion resistance. Excellent electrical properties, moisture, and creep resistance. ABS resists inorganic salts, alkalies and many acids.



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ASTM test	Property	Value
Physical		
D792	Specific gravity	1.05
D570	Water absorption, 24 hours, 3.0 mm thick (%)	0.4
°C	Maximum service temperature	+80
°C	Minimum service temperature	-50
Mechanical		
D638	Tensile strength at yield N/mm <sup>2</sup>	40
D638	Elongation at yield (%)	4
D638	Tensile strength at break N/mm <sup>2</sup>	35
D638	Elongation at break (%)	45
D785	Hardness	R96
	Impact strength mj/mm <sup>2</sup>	no break
D256	Notched impact strength mj/mm <sup>2</sup>	15
	Ball indentation hardness N/mm <sup>2</sup>	69
D790	Flexural strength N/mm <sup>2</sup>	75
D638	Modulus of elasticity N/mm <sup>2</sup>	2000
Thermal		
C177	Thermal conductivity at 20°C	0.25
D696	Coefficient of thermal expansion K-1.10 <sup>-4</sup>	1
D648	Deflection temperature °C	90
D1525	Vicat softening temperature °C	90
Electrical		
D150	Dielectric constant At 1kHz	2.8
D150	Dissipation loss factor At 1kHz	0.01
D257	Volume resistivity (ohm-cm)	10.14
D257	Surface resistancy (ohm)	10.13
Fabrication		
	Welding temperature °C	220
	Forming temperature °C	130

These values are representative of those obtained under standard ASTM conditions and should not be used to design parts, which function under different conditions.

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