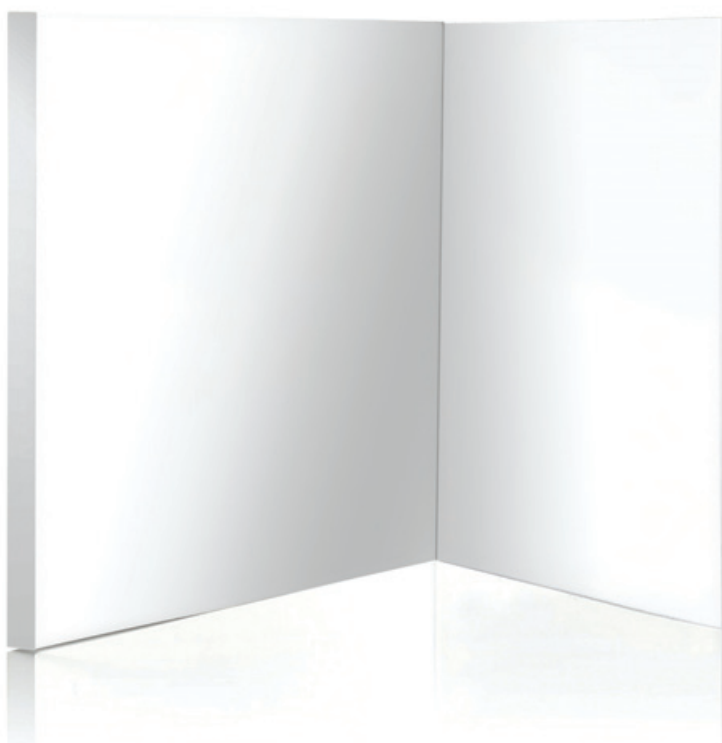


POLYPROPYLENE

Polypropylene is of the polyolefin family of plastics and is semi-crystalline in molecular structure.

Polypropylene can be ordered from Ampa Plastics in two grades: as a homopolymer (a general-purpose grade that is stiffer and more rigid than a copolymer) and as a copolymer, which is further divided into three groups:

- Random copolymer is a tough grade with a low melt-flow index and good impact resistance
- Block copolymer has a lower melting point than random copolymer but offers good impact resistance at lower temperatures
- Impact-modified/resistant copolymer has very good impact strength, even at low temperatures. It is also less stiff than other polypropylene grades. Ampa Plastics produces copolymer as stock. Other grades can be manufactured on request.





Stock availability

COLOUR, FINISH & SHEET SIZE		SHEET THICKNESS (mm)								
(sheet size: length x width in mm)		0.6	1.0	1.5	2.0	3.0	4.0	5.0	6.0	10.0
POLYPROPYLENE										
NATURAL	(2000 x 1000)		●	●	●	●	●	●	●	●
NATURAL	(3000 x 1500)							●		
GREY	(2000 x 1000)					●				
BLACK	(2500 x 1250)							●		
CLEAR MATT	(2500 x 1250)	●								



STOCK IS SUBJECT TO AVAILABILITY. NON-STANDARD SIZES, THICKNESSES AND COLOURS CAN BE MANUFACTURED ON MINIMUM ORDER.

Key features of Polypropylene

- Low density (0.9 to 0.91, slightly higher with additives or fillers)
- Rigid, hard and strong, with good impact strength at temperatures from 10°C to 130°C
- Excellent chemical resistance
- Good acoustic and thermal properties
- Non-hygroscopic
- Suitable for use with food
- Reasonably easy to process and fabricate (especially to weld)
- Fairly resistant to abrasion
- Not that easy to vacuum form due to narrow heat operating window
- Becomes brittle and stiff at temperatures of 5°C or less (ie often in winter)
- Can be blended with additives to enhance specific properties (eg UV resistance and flame retardance)
- Environmentally friendly, in that it is easy to recycle and, provided it contains no additives, burns to produce only carbon monoxide, carbon dioxide and low concentration of oxidation and other by-products such as formaldehyde

Applications of Polypropylene

- **Industrial applications** (eg lining of chemical tanks)
- **Transport** (eg manufacture of mud flaps and stone guards on trucks)
- **Industrial packaging** (eg layer pads and divider boards)

