

POLYETHYLENE

Polyethylene is the plastic probably most used in daily life.

It is used extensively in automotive and industrial engineering applications, as well as industrial packaging due to its excellent performance properties. Ampa Plastics produces high-density polyethylene (PE-HD), which has a density of 0.963, as stock. Other grades (i.e. medium - low density) can be manufactured on request.



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Stock availability

COLOUR, FINISH & SHEET SIZE		SHEET THICKNESS (mm)								
(sheet size: length x width in mm)		1.0	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0
POLYETHYLENE										
NATURAL PE-HD	(2000 x 1000)	●	●	●	●	●	●	●	●	●
NATURAL PE-HD	(3000 x 1500)			●					●	
BLACK PE-HD	(2000 x 1000)	●	●	●	●	●	●		●	
BLACK PE-HD	(3000 x 1500)			●		●			●	

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

Key features of Polyethylene

- Very economical
- Reasonably rigid at higher densities (although not as rigid as polypropylene)
- Highly resistant to many chemicals
- Water-resistant
- Impact-resistant
- Offers good electrical insulation
- Working temperature range: -70°C to 80°C
- Can't be used or worked on at high temperatures (eg in an autoclave)
- Relatively easy to vacuum form or reform
- Can be fabricated
- Resistant to creep
- Easily recyclable
- Can be used with food
- Will float in water
- Surface has semi/medium gloss after extrusion
- Surface gloss is reduced by a second heat cycle (in other words, it becomes more matt after thermoforming/vacuum forming)

Applications of Polyethylene

- Packaging (eg dunnage)
- Engineering applications (eg seals, dam lining)
- Architectural applications (eg cinema and auditorium seat-backs)
- Automobile component manufacture (eg truck liners, bus seat-backs)

