

## Material Specification

### Mulflute® Corrugated Sheet

Impraboard® is corrugated plastic sheet or twin wall plastic sheet made from the highest quality polypropylene material using the most advanced and latest extrusion technology from Europe. There are suitable for various application, ranging from graphic arts, signage, display, agriculture, and other industrial Impraboard® offers you the benefits of :

1. Water resistant
2. Light, strong, and durable
3. Impact resistance
4. Re-usability
5. Hygienic
6. Outstanding weather ability
7. Dimensional stability in extreme temperature
8. Food contact (specially designed for the packaging industry)
9. Excellent surface for printing industry
10. Chemical resistance
11. Easy to convert (cut, form, bend, stitch, glued, etc)

#### Specification/Base Material

- Polypropylene Copolymer
- The base resin meet the FDA (Food and Drug Administration) requirements contained in the Code of Federal Regulations in 21 CFR 177.1520(a)(1)(i) and (c)(1.1a).
- We certify that the total of impurities in the Pigment Materials applied in our production does not exceed the total of: 100 PPM of the "Heavy Metals" Lead, Cadmium, Mercury, and Chromium (VI), indicated in the update of the: Packaging-Directive 94/62/EEC. (As from June 30 2001) and the CONEG-Regulation (USA) (As from January 01 1994) for Food-Packaging Materials.

#### Typical Properties

Property	Test	Unit	Value	Value
<b>Physical</b>			3mm	5mm
Density	ASTM D 792	g/cm <sup>3</sup>	0.5	0.9
Thickness	ASTM D 792	mm	3 ± 0.1	5 ± 0.1
Surface Tension (Dyne Level)	ASTM D 2578	Dyne/cm	54	54
<b>Mechanical</b>				
Flexural Modulus	ASTM D 790	Kgf/cm <sup>2</sup>	9.67	14.95
Stress at Break	ASTM D 638	Kgf/cm <sup>2</sup>	67.54	61.49
Elongation at Break	ASTM D 638	%	1217.96	1661.91
Compressive Strength	ISO 12048-94 (E)	Kgf	188.25	1302.8
Impact Resistance (Puncture Test)	ASTM D 781	Nm	11.08	22.4
Load: 3.5kg				
<b>Thermal</b>				
HDT (0.45 MPa, Unannealed)	ASTM D648	°C	110	110
Vicat Softening Point	ASTM 1525	°C	156	156
Izod Impact Strength	ASTM D 256	Kg.cm/cm	100	174

This specification provides reliable and accurate data to the best of our knowledge at the time of publishing. Due to our inability to control conditions of use and application, we are unable to make any recommendations or suggestions. Mulford Plastics assumes no liability for use of information presented herein.