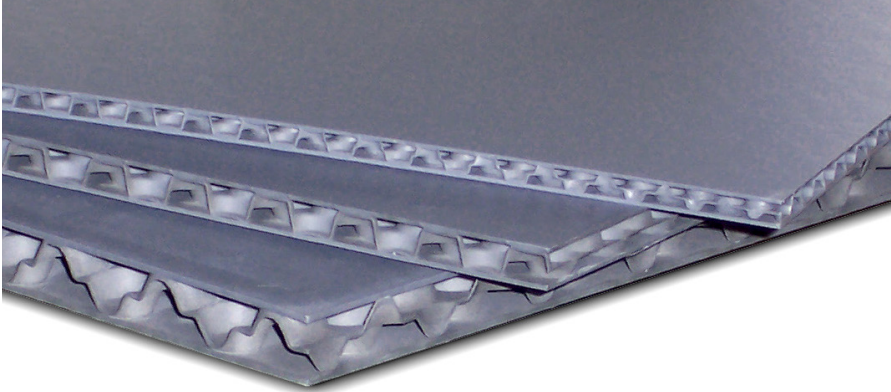


# TriPly®

## Tri-Laminate Material

Triply® is a three-layer polypropylene composite consisting of a central structural sheet sandwiched between two smooth exterior sheets. The key feature is the design of the geometry of the middle structural sheet which provides the exceptional rigidity in all directions. Constant wall thickness improves the quality of the welded bond between the structural middle and the outer sheets, further improving rigidity.

Polypropylene is 100% recyclable. It is manufactured in 2,100mm width and any required length. Available in standard gray or any custom color. Options include: talcum additive for increased strength, UV resistant, ESD conductivity of 10/4 to 10/8 ohms, fire resistant, custom imprinting.

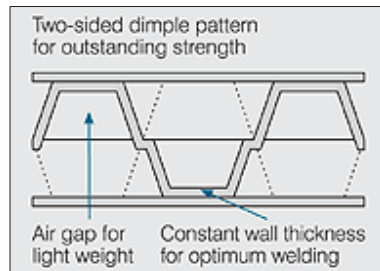


### ADVANTAGES:

- Extremely Lightweight and Rigid
- High Compressive and Impact Strength
- Smooth and Level Surface
- Moisture Resistance
- Suitable for Contact with Food and Water
- Compatible with most Printing Processes
- Excellent Insulation
- Excellent Chemical Resistance
- Custom Sizes Available

### AVAILABLE SIZES:

- Standard sheet size: 1,981mm x 2,235mm (78"x88")
- Special Order up to 2,100mm Wide by any Required Length
- Custom Fabricated Modules and Sleeves.



### OPTIONS:

- Custom Sizes
- Custom Colors
- Custom Imprinting
- ESD Conductive 10/4 to 10/8 ohms
- UV Resistant
- Talcum Additive for Increased Strength
- Fire Resistant

## TriPly 3.5

Specific Weight: ..... 1000 g/m<sup>2</sup>  
Thickness: ..... 3.5 mm

## TriPly 3.8

Specific Weight: ..... 1500 g/m<sup>2</sup>  
Thickness: ..... 3.8 mm

## TriPly 5.0

Specific Weight: ..... 1000 g/m<sup>2</sup>  
Thickness: ..... 5.0 mm

## TriPly 5.4

Specific Weight: ..... 1500 g/m<sup>2</sup>  
Thickness: ..... 5.4 mm

## TriPly 5.9

Specific Weight: ..... 2000 g/m<sup>2</sup>  
Thickness: ..... 5.9 mm

## TriPly 6.5

Specific Weight: ..... 2500 g/m<sup>2</sup>  
Thickness: ..... 6.5 mm

## TriPly 9.7

Specific Weight: ..... 2000 g/m<sup>2</sup>  
Thickness: ..... 9.7 mm

## TriPly 10.0

Specific Weight: ..... 2500 g/m<sup>2</sup>  
Thickness: ..... 10.0 mm

## TriPly 10.3

Specific Weight: ..... 3000 g/m<sup>2</sup>  
Thickness: ..... 10.3 mm

## TriPly 10.4

Specific Weight: ..... 3500 g/m<sup>2</sup>  
Thickness: ..... 10.4 mm

## TriPly 11.0

Specific Weight: ..... 4000 g/m<sup>2</sup>  
Thickness: ..... 11.0 mm

**Excellent Alternative to Con-Pearl®**

Con-Pearl is a Registered Trademark of Friedola Gebr. Holzapfel GmbH

## TriPly: Performance Data

Properties:	TriPly 3 1000 g/m <sup>2</sup>	TriPly 5 1500 g/m <sup>2</sup>	TriPly 10 3000 g/m <sup>2</sup>
Area Weight:	1059 g/m <sup>2</sup>	1638 g/m <sup>2</sup>	2939 g/m <sup>2</sup>
Overall Thickness:	3.1 mm	5.8 mm	10.7 mm
Density:	0.34 g/cm <sup>3</sup>	0.29 g/cm <sup>3</sup>	0.28 g/cm <sup>3</sup>
Tensile Strength MD:	1026 N/50 mm	1677 N/50 mm	2353 N/50 mm
Tensile Strength TD:	1220 N/50 mm	1506 N/50 mm	2179 N/50 mm
Elongation at Break MD:	42 %	41 %	15 %
Elongation at Break TD:	38 %	31 %	17 %
Flexural Strength MD:	11.3 N/mm <sup>2</sup>	11.4 N/mm <sup>2</sup>	8.9 N/mm <sup>2</sup>
Flexural Strength TD:	11.2 N/mm <sup>2</sup>	10.8 N/mm <sup>2</sup>	8.1 N/mm <sup>2</sup>
Flexural Modulus of Elasticity MD:	489 N/mm <sup>2</sup>	797 N/mm <sup>2</sup>	918 N/mm <sup>2</sup>
Flexural Modulus of Elasticity TD:	577 N/mm <sup>2</sup>	734 N/mm <sup>2</sup>	772 N/mm <sup>2</sup>
Puncture Resistance Ultimate Force:	576 N	954 N	1052 N
Puncture Resistance Work:	5.0 J	9.6 J	13.8 J
Edge Crush Resistance:	9.3 kN/m	27.8 kN/m	53.4 kN/m
Surface Crush Resistance:	775 kN/m <sup>2</sup>	1300 kN/m <sup>2</sup>	750 kN/m <sup>2</sup>
Dimensional Stability:	< 0.1 %	< 0.1 %	< 0.1 %
Cold Impact Strength:	250 mm	250 mm	230 mm
Combustion Behaviour:	29 mm/min	20 mm/min	27 mm/min

MD = Machine Direction

TD = Traverse Direction

Source of data: Test report 63820/04 from Süddeutsches Kunststoff-Zentrum (SKZ). Although all data provided is correct and reliable, users are advised to conduct their own tests to determine suitability for their specific application.

## Chemical Resistance of Plastic Resins

	PP (TriPly)	PE	PB	Rigid PVC	Flexible PVC	PS	SB	SAN	ABS	ASA	PMMA	PC
Acetic acid, concentrated:	●	●	●	○	○	○	○	○	○	○	○	○
Acetone:	●	○	○	○	○	○	○	○	○	○	○	○
Alcoholic beverages:	●	●	●	●	●	●	●	●	●	●	●	●
Ammonia, aqueous:	●	●	●	●	●	●	●	●	●	●	●	●
Benzene:	○	○	○	○	○	○	○	○	○	○	○	○
Diesel fuel:	●	●	●	○	○	○	○	○	○	○	○	○
Dishwashing soap:	●	●	●	○	○	○	○	○	○	○	○	○
Flourinated hydrocarbons:	○	○	○	○	○	○	○	○	○	○	○	○
Fruit juices:	●	●	●	●	●	●	●	●	●	●	●	●
Hydrofluoric acid, up to 20%:	●	●	●	○	○	○	○	○	○	○	○	○
Hydrofluoric acid, up to 35%:	●	●	●	○	○	○	○	○	○	○	○	○
Laundry detergents:	●	●	●	○	○	○	○	○	○	○	○	○
Methanol:	●	●	●	○	○	○	○	○	○	○	○	○
Milk:	●	●	●	○	○	○	○	○	○	○	○	○
Motor oil:	●	●	●	○	○	○	○	○	○	○	○	○
Ozone:	○	○	○	○	○	○	○	○	○	○	○	○
Petrol (gasoline):	○	○	○	○	○	○	○	○	○	○	○	○
Potassium hydroxide, conc.:	●	●	●	○	○	○	○	○	○	○	○	○
Silicone oil:	●	●	●	○	○	○	○	○	○	○	○	○
Soap solution, aqueous:	●	●	●	○	○	○	○	○	○	○	○	○
Sodium hydroxide, conc.:	●	●	●	○	○	○	○	○	○	○	○	○
Sulfuric acid, up to 40%:	●	●	●	○	○	○	○	○	○	○	○	○
Toluene:	○	○	○	○	○	○	○	○	○	○	○	○
Trichloroethylene:	○	○	○	○	○	○	○	○	○	○	○	○
Vegetable oils/vegetable fats:	●	●	●	○	○	○	○	○	○	○	○	○
Water/salt water, cold:	●	●	●	●	●	●	●	●	●	●	●	●
Water, hot:	●	●	●	○	○	○	○	○	○	○	○	○

● = Resistant ○ Conditionally Resistant ○ Not Resistant

All information above, while provided to the best of our knowledge and experience, is provided solely as a general guide and should be confirmed by testing users' specific applications.

## Special Applications:

Sohner Plastics utilizes TriPly in the manufacturing of its durable MEGA-PACK returnable/reusable packaging systems, pallet sleeves, dividers, and more.

We can design and manufacture any custom application to your exact needs.

