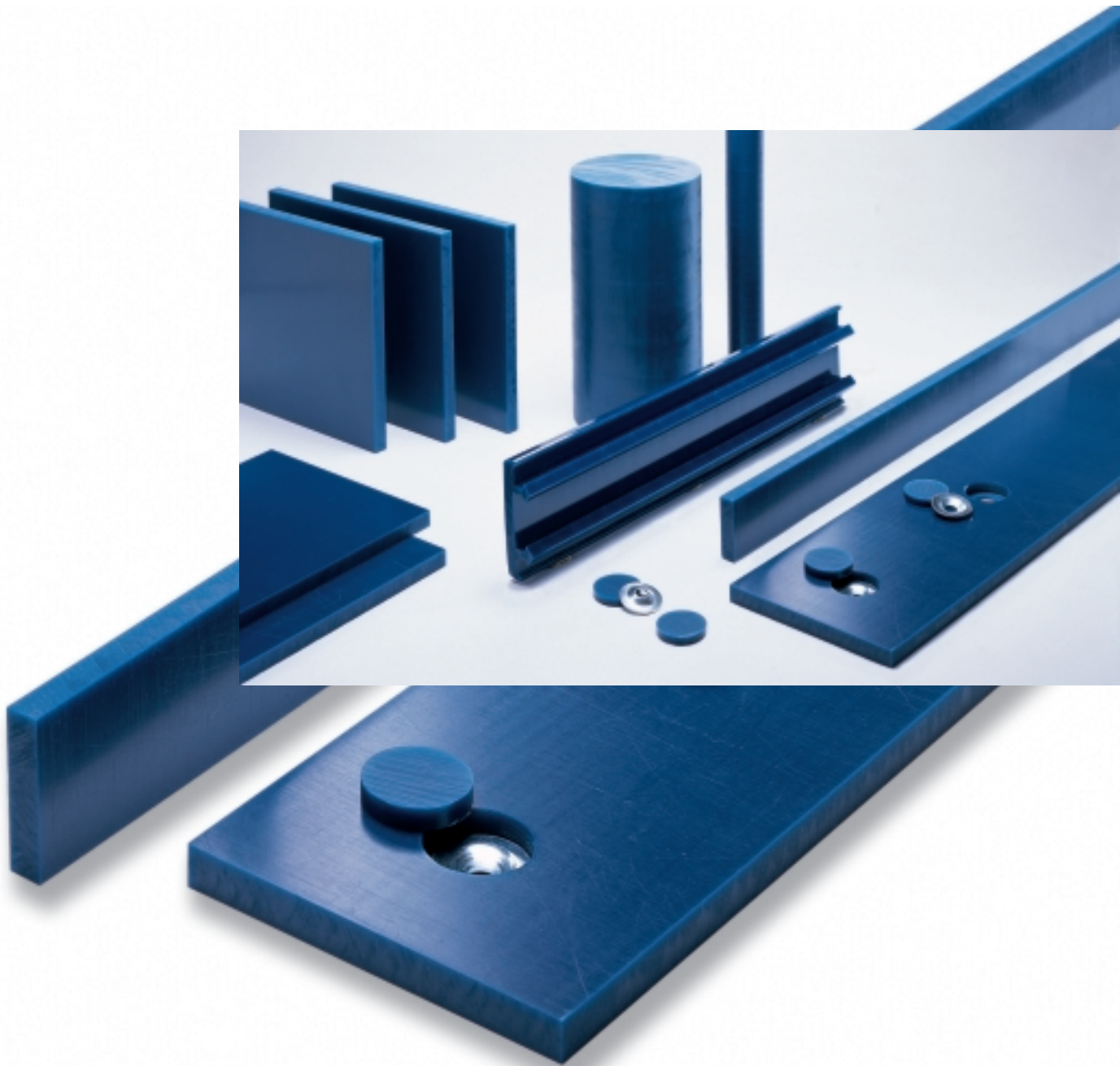


**Polystone®**  
Thermoplastics

**Polystone® MPG (Premium Grade UHMW-PE)**  
Competence. Performance. Confidence.



# Polystone® MPG (UHMW-PE)

## Engineered for the toughest jobs

Polystone® MPG was originally developed for the most abrasive applications in the pulp and paper industry, such as suction box covers and foil blades. However, when engineers and maintenance personnel in other industries searched for a material that could withstand severe abrasion in a corrosive environment while providing exceptional non-stick qualities, MPG emerged as the ultimate solution.

Today, MPG is used extensively as liners and wear components in all types of unit and bulk material handling applications.

Previously offered in 4' x 10' sheets, Röchling has now changed the way traditional liners are designed and installed. Polystone® MPG is available in the exclusive MegaSheet™ - the huge 8' x 20' molded sheet. Better yields, significantly fewer seams and reduced labor costs all add up to a better product with superior performance.

### Properties

- Superior abrasion resistance - greater than standard virgin UHMW
- Low coefficient of friction - promotes material flow
- Excellent chemical and corrosion resistance
- High impact strength
- No moisture absorption - virtually eliminates sticking, even in freezing conditions
- Easy to machine - most general power tools are sufficient

### Applications

- Chute and hopper liners for coal, gravel, sand, fertilizer, phosphate, grain and wood chips
- Conveyor liners and skirting
- Dragline bucket liners
- Truckbed liners
- Railcar liners
- Silo and bin liners
- Suction box covers and foil blades
- Scrapers
- Wear strips
- Wire sheaves



# Range of Products

## Physical Properties and Installation Guidelines

Physical Properties			
Property	Unit	ASTM Test	Polystone® MPG
Density	gm/cm <sup>3</sup>	D792	.96
Tensile strength at yield 73° F	psi	D638	2700
IZOD impact strength 73° F	KJ/m <sup>2</sup>	D4020	110
*Relative volumetric abrasion loss	*	*	75
Coefficient of friction on steel	°F	Static	.15 - .20
		Dynamic	.10 - .20
Hardness	Shore D	D785	63 - 67
Coefficient of linear thermal expansion	1/K	D696	1.0 x 10 <sup>-4</sup>

### Polystone® MPG (UHMW-PE)

#### Sheets

1/8" - 4" x 48" x 120"  
 3/8" - 4" x 48" x 96"  
 3/8" - 4" x 48" x 240"  
 3/8" - 4" x 60" x 96"  
 3/8" - 4" x 96" x 80"  
 3/8" - 4" x 96" x 120"  
 3/8" - 4" x 96" x 240"

#### Rods

1" - 6" diameter

#### Profiles

Standard and custom

**Cut-to-size pieces and pre-fabricated liners available upon request**

\*Industry standard testing method using a slurry of 60% aluminum oxide and 40% water at a rotation of 1750 rpm for 2 hours. Results indicate the ability, in relation to Natural (=100), to resist abrasion under typical UHMW-PE applications. A lower number indicates better abrasion resistance.

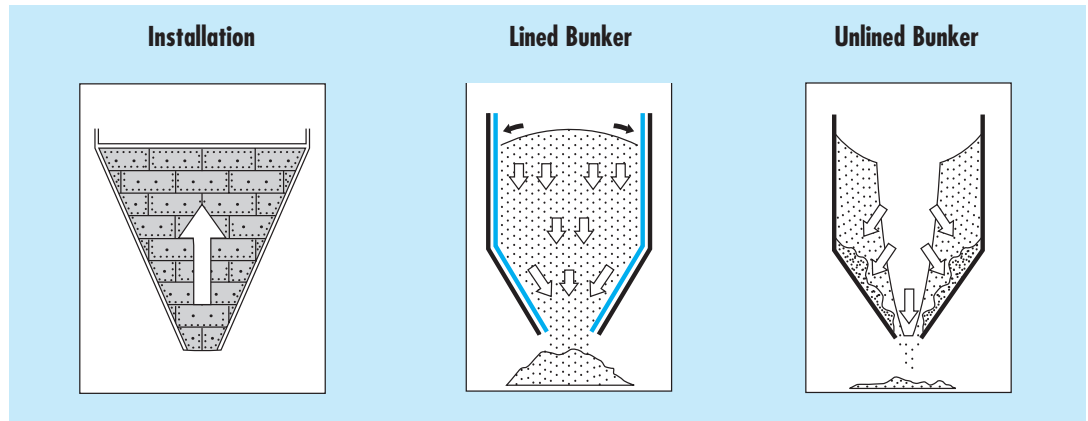
The information listed herein is stated to provide a general guideline for Polystone® MPG and its uses. The values given are based on laboratory testing backed with global industry experience. However, the data should not be considered as guaranteed specific properties. Suggested applications are provided for information only and are not specific recommendations.

### Polystone® MPG

#### Liner installation

Sheets are typically installed from the bottom to the top, and overlapped or beveled with a 45° angle.

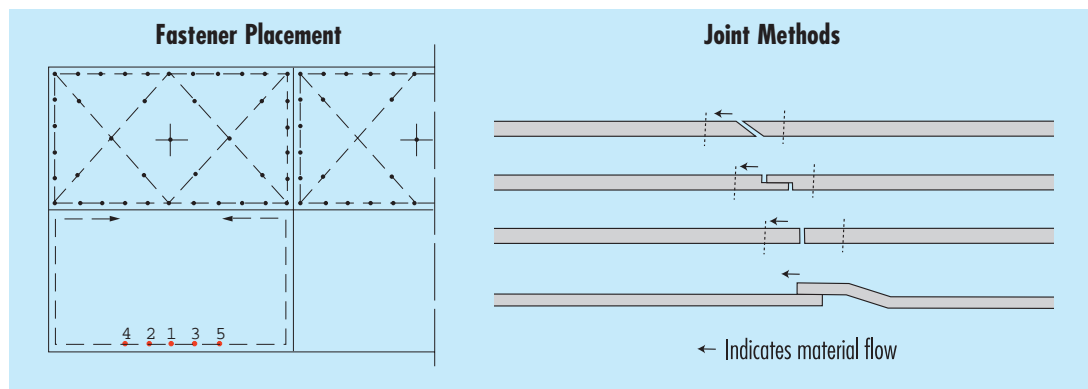
Thermal expansion and contraction should be taken into account when choosing a fastening system. Weld washers/plugs and capped elevator bolts are the most popular fasteners, however the type used depends on the substrate.



#### Fastener Spacing

MPG thickness	Typical spacing
1/4"	4"-6"
3/8"	8"-10"
1/2" - 3/4"	10"-12"
1" & over	12"-15"

Maximum 2" from edge of liner





# Röchling, the international leader in plastics manufacturing and fabricating

## Range of products

Semi-finished products (sheets, panels, rods, profiles) as well as highly precise machined items of

- thermoplastics
- glass fibre reinforced plastics
- laminated compressed wood



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