POLAR INDUSTRIES, Inc.

www.polarindustries.net

PO Box 293
Fisher Branch, MB
R0C 0Z0
Tel: 204-372-8482
Fax: 204-372-8479

Sales Office: 3801 Howell Bend Ct. Oviedo, Fl. 32765 ♦ Tel. (407) 677-6664 ♦ Fax (407) 678-6684

Green Poly Pier Foundation - 7040 Series

MATERIAL AND APPLICATION

7040 Green Poly Pier/Foundation is premium quality two component, non-VOC hydrophobic, natural polyurethane.
7040 Green Poly Pier/Foundation is designed for all pier/foundation applications where strength and flexibility are paramount, such as shifting ground, wet ground, porous rock.
7040 will bind well with fiberglass of PPG™ origin. Other fibreglasses should be tested for coating compatibility of the fiberglass with the epoxy.

MIXTURES

Percentage with Sand Gravel	parts of mass		Elasticity Newton/meters	Tensile Strength Newton/meters
	A	B	30.58	6.32
8%	3.0	1	Strength in Newton/meters 24 - 28	Tint to choice.

A: epoxid; B: hardener; C: calcium hydrogen phosphate (add “C” 2-3% as desired)

NOTES:

- For pressure applications, 2 component system available.
- different % of components for different applications will result in different qualities of end product fiberglass.
- different % for different fiber glass types – on account of the coverings on different fiberglass base fibers.

PROPERTIES 7040

Feature	unit	value	measure method
pour point	°C	-10	Factory prescription
kin. viscosity by 23°C	mm²/s	----	DIN 53 019
sp. Weight	g/cm³	1.17	DIN EN ISO 3675
gel time by 23°C (1.5 kg accretion)	min	55	according application
curing time	d	approx. 7	according application
Hardness	Shore D	>60	
Durability of chemical Component A B	 month month	 24 approx. 6	 bei 20°C in PE-container

RESISTANCE AGAINST CHEMICALS

agent	findings	agent	findings
Solvents		**Salts**	
gasoline	R	NaCl 3 %	R
(Bio)Diesel	R	NaCl saturated	R
Methanol	R	$CaCl_2$saturated	R
Acetone	swelling		
Acids		**Lyes**	
HCl	R	NaOH	slow saponification
H_3PO_4	R	KOH	slow saponification
HCOOH	R		
CH_3COOH	R		
H_2SO_4	oxidation		
HNO_3	oxidation		

R = Resistant

REMARKS FOR PROCESSING

The components A and B respectively C are stirred together with a slow running agitator by 300 rotations per min. The optimal processing temperature is given by $12°C \leq Tp \leq 30°C$.
All of devices can be cleaned by acetone or water – acetone mixtures.

DISPOSAL

Remains can be chopped up and be composted or burned.