

Telene® pDCPD Chemical Resistance Non reinforced grade

- The following table gives indications on the suitability of Telene® polymers in applications where the material comes into intimate & sustained contact with the liquid medium.
- For individual applications in specific chemical environments, testing prior to use is recommended.
- The chemical resistance at elevated temperatures in non-oxidative acid or alkaline media is excellent, as it is in weaker solutions of sulphuric & nitric acids at ambient temperatures.
- The table has been constructed by grouping the results of the following mechanical and physical tests and comparing to untreated polymer:
 - Change in tensile strength
 - Change in tensile yield
 - Change in flexural modulus
 - Change in shore hardness
 - Change in dimensions

R = Recommended

N = Not recommended

Temperature	23°C				60°C				105°C			
	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo
Reagent												
10% Acetic Acid	R	R	R	R	R	R	R	R	R	R	R	R
50% Phosphoric Acid	R	R	R	R	R	R	R	R	R	R	R	R
30% Phosphoric Acid	R	R	R	R	R	R	R	R	R	R	R	R
55% Phosphoric Acid	R	R	R	R	R	R	R	R	R	R	R	R
70% Phosphoric Acid	R	R	R	R	R	R	R	R	R	R	R	R
50% Potassium Hydroxide	R	R	R	R	R	R	R	R	R	R	R	R
13% Sodium Hypochlorite	R	R	R	R	R	R	R	R	R	R	R	R
30% Fluosilicic Acid	R	R	R	R	R	R	R	R	R	R	R	R
10% Hydrogen Peroxide	N	N	N	N	N	N	N	N	N	N	N	N

Temperature	23°C				60°C				105°C			
Duration	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo
Reagent												
25% Sulphuric Acid	R	R	R	R	R	R	R	R	R	R	R	R
75% Sulphuric Acid	R	R	R	N	N	N	N	N	N	N	N	N
10% Nitric Acid	R	R	R	R	R	R	N	N	N	N	N	N
50% Nitric Acid	R	N	N	N	N	N	N	N	N	N	N	N
10% Hydrochloric Acid	R	R	R	R	R	R	R	R	R	R	R	R
30% Hydrochloric Acid	R	R	R	R	R	R	R	R	R	R	R	R
10% Sodium Hydroxide	R	R	R	R	R	R	R	R	R	R	R	R
50% Sodium Hydroxide	R	R	R	R	R	R	R	R	R	R	R	R
Water	R	R	R	R	R	R	R	R	R	R	R	R

Temperature	23°C				60°C				105°C			
Duration	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo	1wk	1mo	3mo	6mo
Reagent												
30% Fluosilicic Acid	R	R	R	R	R	R	R	R	R	R	R	R
Glycerol pure	R	R	R	R	R	R	R	R	R	R	R	R
20% Hydrofluoric Acid	R	R	R	R	R	R	R	R	R	R	R	R
Sulfur Dioxide SO ₂	R	R	R	R	R	R	R	R	R	R	R	R
80% Lactic Acid	R	R	R	R	R	R	R	R	R	R	R	R
30% Sodium Bisulfite	R	R	R	R	R	R	R	R	R	R	R	R
Hydrogen Sulfide H ₂ S	R	R	R	R	R	R	R	R	R	R	R	R
40% Dimethylamine	R	R	R	R	pressure	vapour	>3 bars		pressure	vapour	>10 bars	
32% Ammonium Hydroxide	R	R	R	R	pressure	vapour	>8 bars		pressure	vapour	>20 bars	