

Chemical Resistance

Pebax® thermoplastic elastomers in general possess good resistance to chemicals. They may swell in certain solvents (this tendency is stronger for softer grades).

Any application that exposes Pebax® thermoplastic elastomers to chemicals must be considered a special case. It is particularly important to contact Arkema's technical team, and when possible, carry out tests under real-life conditions.

Resistance to solvents

The following table indicates the resistance of Pebax® grades to common solvents and chemicals.

Chemical	Test conditions		Grades							
	Days	°C	7233	7033	6333	5533	4533	4033	3533	2533
10% sulphuric acid	7	23	A	A	A	A	A	A	A	A
10% caustic soda	7	23	A	A	A	A	A	A	A	A
50% zinc chloride	7	23	A	A	A	A	A	A	A	A
Boiling water	7	100	A	A	A	A	A	A	A	A
"Skip" detergent (30g/l)	7	95	A	A	A	A	A	A	A	A
Caustic potash (34° Baumé)	7	70	A	A	A	A	A	A	A	A
Lockeed H55	7	121	A	A	A	B	C	C	C	C
Skydrol	7	121	B	B	B	C	C	C	C	C
ASTM N°1 oil	3	100	A	A	A	A	A	A	B	B
	7	121	A	A	A	A	A	A	C	C
ASTM N°3 oil	3	100	A	A	A	A	B	B	C	C
	7	121	A	A	A	A	B	B	C	C
Ethanol	7	23	A	A	A	A	A	A	B	C
Propanol	7	23	A	A	A	B	B	B	C	C
Butanol	7	23	B	B	B	B	C	C	C	C
Isooctane	7	A	A	A	A	A	A	A	A	A
4-star petrol	7	23	A	A	A	B	B	B	C	C
M 15 fuel	2	50	B	B	B	B	C	C	C	C
Kerosene	7	23	A	A	A	A	B	B	B	C
Paraffin	7	23	A	A	A	A	A	A	B	B
Fuel B	7	23	A	A	A	A	B	B	C	C
	2	50	A	A	A	B	B	B	C	C
Fuel C	2	50	A	A	A	B	B	B	C	C
Benzene	7	23	A	A	A	A	B	B	C	C
Acetone	7	23	A	A	A	A	A	A	A	A
Ethylene-glycol	7	23	A	A	A	A	A	A	A	A
Methylethylketone	7	23	A	A	A	A	B	B	C	C
Methylene chloride	7	23	C	C	C	C	C	C	C	C
Trichloroethylene	7	23	B	B	B	B	C	C	C	C
Perchloroethylene	7	23	A	A	A	B	B	B	C	C
Freon 11	7	23	B	B	B	B	B	B	C	C
Freon R 22	7	45	B	B	B	C	C	C	C	C
Freon R 502	7	45	B	B	B	B	C	C	C	C

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- A Little or no effect
- B: Moderate effect
- C: Severe effect

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