

**Technopolymer and Rubber**  
**Resistance to chemical agents at 23 °C temperature**

Chemical agents and solvents	Polyamide (PA)		Trans-parent polyamide (PA-T)		Alcohol-Resistant transparent polyamide (PA-TAR)		Poly-propylene (PP)		Acetal resin (POM)		Poly-carbonate (PC)		Soft-Touch thermoplastic elastomer (TPE)		Rubber NBR		Flourated Rubber FKM		Natural rubber NR				
	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%	Notes	%			
Acetic acid	Sol.	10	▲	Sol.	10	▲	Sol.	10	□	40	●	Sol.	20	▲	Sol.	10	●		●		▲	□	
Acetone		100	●			□			●		●			▲		●		▲		▲		▲	
Acrylonitrile		100	●			▲			▲					□		▲		▲		▲		▲	
Aluminium chloride	Sol.	10	●			▲			●					●		●	Sol.	●	Sol.	●		●	
Aluminium sulphate	Sol.	10	●	Sol.	10	▲	Sol.	10	●	Sol.	50	●		●		●	Sol.	●	Sol.	●		●	
Ammonia gas			□			●			●					□		●		▲		▲		▲	
Ammonia	Sol.	10	●	Sol.	10	●	10	●	Conc.	●				▲		□	Sol.	□	Sol.	▲		▲	
Ammonium chloride	Sol.	10	●	Sol.	10	●	Sol.	10	●		●	Sol.	10	▲		●		●	Sol.	●		●	
Amyl alcohol		100	●			▲			●					□		●		●		●		●	
Aniline		100	□			▲			●						●		▲		●		●	●	
Beer			●			●			●					●		●		●		●		▲	
Benzoic acid	Sol.	Sat.	□	Sol.	10	▲	Sol.	10	□	Sat.	●			up to 60°C		●	Sol.	□	Sol.	●		●	
Benzol/benzene		100	●			●			●		▲			▲		▲		▲		●		▲	
Boiling water	Swell.		□	Swell.		□	Swell.		□		●			□		□		□		□		▲	
Boric acid	Sol.	10	●			□			□	Sat.	●					●	Sol.	●	Sol.	●		▲	
Butter			●			●			●		●			●		●		●		●		▲	
Butyl acetate		100	●	100	●		100	●		●				□		●		●		●		▲	
Butyl alcohol		100	●			▲			●		●			●		●		●		●		●	
Butylene glycol		100	●			▲			□					□		●		●		●		●	
Calcium chloride	Sol.	10	●			●			●	Sol.	50	●		●		●	Sol.	●	Sol.	●		●	
Carbon disulphide		100	●			□			□		▲					▲		▲		●		▲	
Carbon tetrachloride			●			□			●		▲			▲		▲		▲		●		▲	
Caustic potash	Sol.	5 - 10	●	Sol.	5 - 10	●	Sol.	5 - 10	●	Sol.	5 - 10	●	Sol.	10	□		●	Sol.	5 - 10	□	Sol.	5 - 10	▲
Caustic potash	Sol.	50	□	Sol.	50	●	Sol.	50	●	Sol.	50	●				●	Sol.	50	▲	Sol.	50	▲	●
Chloroform		100	▲			▲			▲		▲			▲		▲		▲		●		●	
Citric acid	Sol.	10	□	Sol.	10	□	Sol.	10	□	10	●			●	Sol.	10	●	up to 60°C	●	●	Sol.	●	
Copper sulphate	Sol.	10	●						●		●					●	Sol.	●	Sol.	●		●	
Dichloropropane									□							▲		▲		●		●	
Distilled water			●			●			●		●			●		●		●		●		▲	
Edible fats			●			●			●		●			●		●		●		●		●	
Edible oils			●			●			●		●			●		●		●		●		□	
Ethyl acetate		100	●	100	●		100	●		●				▲		▲		▲		▲		▲	
Ethyl alcohol (ethanol)		96	●			▲			●	96	●			●		●		□		□		▲	
Ethyl chloride		100	●			▲			▲		▲					●		●		●		●	
Ethylene glycol			●			▲			□		●			□		●		●		●		▲	
Ethyl ether			●			●			●		●			▲		▲		□		▲		●	
Ferric chloride	Sol.	10	●			●			●		●					●	Sol.	●	Sol.	●		▲	
Formaldehyde (formalin)	Sol.		●	Sol.	40	□	Sol.	40	●	Sol.	40	●		●		▲	Sol.	40	□	Sol.	40	●	
Formic acid	Sol.	10	▲	Sol.		▲	Sol.		▲	Sol.	10	●	100	▲	Sol.	30	□	up to 60°C	●	Sat.	▲	▲	
Freon 11									□		●					●		●		□		▲	
Freon 12	Liq.		●			●			●		□			●		●		●		□		▲	
Freon 13									□		●					●		●		●		●	
Gas oil			●			●			●		●			●		●		▲		●		●	
Gasoline vapor			●			●			●	Swell.	□			▲		▲		□		●		●	
Glycerin			●			●			●		●			□		▲		●		●		□	
Green gasoline			●			●			●	Swell.	□			▲		▲		□		●		●	
Hydrochloric acid	Sol.	10	▲	Sol.	10	□	Sol.	10	□	Sol.	30	●	Sol.	10	▲	Sol.	10	●	up to 60°C	●	Sol.	10	□
Hydrofluoric acid	Sol.	40	▲	Sol.	10	▲	Sol.	10	▲	Sol.	40	●		▲		●		50	▲	50	●	▲	
Hydrogen peroxide	Sol.	3	▲	Sol.	3	▲	Sol.	3	▲	30	●	Sol.	90	▲	Sol.	30	●	□	Sol.	80	▲	▲	
Iodine			▲			▲			▲		●			□		●		●		●		●	



# TECHNICAL DATA

## Technopolymer and Rubber Resistance to chemical agents at 23 °C temperature

Chemical agents and solvents	Polyamide (PA)	Transparent polyamide (PA-T)	Alcohol-Resistant transparent polyamide (PA-TAR)	Poly-propylene (PP)	Acetal resin (POM)	Poly-carbonate (PC)	Soft-Touch thermoplastic elastomer (TPE)	Rubber NBR	Flourated Rubber FKM	Natural rubber NR
	Notes %	Notes %	Notes %	Notes %	Notes %	Notes %	Notes	Notes %	Notes %	Notes %
Isopropyl alcohol (isopropanol)	●	▲	●	●	●	□	●	□	●	●
Kerosene	●	●	●	□	●	▲	▲	●	●	▲
Lactic acid	Sol. 10 ●	Sol. 10 □	Sol. 10 □	Sol. 20 ●	●	Sol. 10 ●	up to 60°C	Sol. ●	Sol. ●	▲
Light petroleum	●	▲	□	●	●	□	▲	●	●	▲
Linseed oil	●	●	●	●	●	●	up to 60°C	●	●	▲
Magnesium chloride	Sol. 10 ●	●	●	Sol. Sat ●	●	●	●	Sol. ●	Sol. ●	●
Mercuric chloride	Sol. 6 ▲	●	●	●	●	●	●	●	●	●
Mercury	●	●	●	●	●	●	●	●	●	●
Methyl acetate	100 ●	100 ●	100 ●	●	●	●	□	●	●	□
Methyl alcohol	100 ●	▲	●	100 ●	●	▲	●	□	▲	□
Methylene chloride	100 ●	▲	●	●	□	▲	▲	▲	▲	●
Methyl ethyl ketone	●	▲	▲	●	□	▲	▲	▲	▲	●
Milk	●	●	●	●	●	●	●	●	●	▲
Mineral oil	●	●	●	●	●	●	up to 60°C	●	●	●
Nitric acid	10 ▲	Sol. 2 □	Sol. 2 □	Sol. 10 ●	Sol. 10 ▲	Sol. 20 □	□	Sol. 10 □	Sol. □	●
Oleic acid	100 ●	●	●	Sol. ●	●	●	up to 60°C	●	□	●
Paraffin oil	●	●	●	●	●	●	up to 60°C	●	●	□
Phenol	Sol. ▲	▲	▲	●	▲	▲	▲	▲	▲	●
Phosphoric acid	Sol. 10 ▲	▲	▲	Sol. 85 ●	Sol. 10 ▲	Sol. 10 ●	up to 60°C	●	Sol. 20 □	Sol. ●
Potassium nitrate	Sol. 10 ●	Sol. 10 ●	Sol. 10 ●	Sat. ●	●	●	●	●	●	▲
Sea water, river, drinking	●	●	●	●	●	●	●	●	●	●
Silicone oil	●	●	●	●	●	●	●	●	●	●
Silver nitrate	●	Sol. 10 ●	Sol. 10 ●	Sol. 20 ●	●	●	●	Sol. □	●	●
Soap solution	Sol. ●	Sol. ●	Sol. ●	Sol. ●	●	●	●	Sol. ●	Sol. ●	▲
Sodium carbonate	Sol. 10 ●	●	●	Sol. Sat. ●	●	●	●	Sol. ●	Sol. ●	▲
Sodium chloride	Sol. ●	Sol. 25 ●	Sol. 25 ●	Sol. Sat. ●	●	●	●	Sol. ●	Sol. ●	●
Sodium hydroxide	Sol. 5 - 10 ●	Sol. 5 - 10 ●	Sol. 5 - 10 ●	Sol. 5 - 10 ●	Sol. 10 ●	●	●	Sol. 5 - 10 □	Sol. 5 - 10 ▲	●
Sodium hydroxide	Sol. 50 □	Sol. 50 ●	Sol. 50 ●	Sol. 50 ●	●	●	●	Sol. 50 ▲	Sol. 50 ▲	●
Sodium hypochlorite	Sol. ●	▲	▲	Sol. 20 ●	Sol. 5 ▲	Sol. 5 ●	●	Sol. 10 ▲	Sol. 10 ▲	●
Sodium nitrate	Sol. 10 ●	Sol. 10 ●	Sol. 10 ●	●	●	▲	●	●	●	●
Sodium silicate	●	●	●	●	●	●	●	●	●	●
Sodium sulphate	Sol. 10 ●	Sol. 10 ●	Sol. 10 ●	●	●	●	●	Sol. ●	Sol. ●	□
Sulfuric acid	Sol. 10 ▲	Sol. 2 ●	Sol. 2 ●	98 ●	Sol. 10 ▲	Sol. 50 ●	up to 60°C	●	Sol. 20 □	Sol. 20 ●
Tartaric acid	●	Sol. □	Sol. □	Sol. 10 ●	●	●	up to 60°C	●	Sol. ●	Sol. ●
Tetralin	●	●	●	▲	●	▲	▲	▲	▲	□
Toluol/toluene	●	●	●	□	●	▲	▲	▲	▲	▲
Transformer oil	●	●	●	□	●	●	up to 60°C	□	●	▲
Trichlorethylene (Trichloroethylene)	□	●	●	▲	●	▲	▲	▲	▲	□
Vaseline	●	●	●	●	●	●	□	●	●	▲
Vinegar	●	●	●	●	●	●	●	□	□	▲
Water vapor	●	●	●	●	●	●	●	□	●	□
Whisky	●	□	●	●	●	●	●	●	●	□
Wine	●	●	●	●	●	●	●	●	●	□
Xylene	●	●	●	▲	●	▲	▲	▲	▲	□
Zinc chloride	□	Sol. 50 ●	Sol. 50 ●	Sol. 20 ●	●	●	●	Sol. ●	Sol. ●	▲

● = good resistance  
 □ = fair resistance (limited use according to working conditions)  
 ▲ = poor resistance (should not be used)  
 Blanks stand for data not available

**Conc.** = concentration  
**Sol.** = solution  
**Liq.** = liquid  
**Sat.** = saturated  
**Rigont.** = swelling

The characteristics described should be treated as guidelines only. No guarantee is made.  
 The exact conditions of use have to be taken into account individually.