

Chemical resistance

Important criteria for testing chemical resistance are temperature, the concentration of the agents, the residence time and the mechanical load. The resistance against various chemicals is listed in the following table. These details correspond to the present state of our knowledge and are meant to provide information about our products and their applications. They do not mean that the chemical resistance

of products or their suitability for a particular purpose is guaranteed in a legally binding way. Any existing commercial proprietary rights are to be taken into account. For specific applications it is recommended that suitability is first established. Standard testing is performed in normal climatic conditions 23/50 according to DIN EN ISO 291.

	TECASINT (PI)	TECAPEEK HT, ST (PEK, PEKEKK)	TECAPEEK (PEEK)	TECATRON (PPS)	TECAPEI (PEI)	TECASON E (PES)	TECASON P (PPSU)	TECASON S (PSU)	TECAFLON PTFE (TF)	TECAFLON PVDF (PVDF)	TECAMID G (PAG)	TECAMID 46, 66 (PA46, 66)	TECAMID 11, 12 (PA11, 12)	TECARIM (PAG C + elastomer)	TECANAT (PC)	TECAPET (PET), TECADUR PBT (PBT)	TECAFORM AH (POM-C)	TECAFORM AD (POM-H)	TECAFINE PP (PP)	TECAFINE PE (PE)	TECARAN ABS (ABS)	TECANYL (PPE)
Acetamide 50%			+						+	+	+	+	+	+			+	+	+	+	+	+
Acetone	+	+	+	+	-	-	-	-	+	0	+	+	0	+	-	0	+	+	+	+	-	-
Formic acid, aqueous solution 10%	+	+	+	+	+	+	+	+	+	+	-	-	-	-	-	0	-	-	+	+	+	+
Ammonia solution 10%	-	+	+	+	-	0		0	+	+	0	0	0	0	-	-	+	0	+	+	+	+
Anone					-				+	0	+	+	+	+				+	+	0		
Benzine	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	0	0	0	-
Benzene	+	+	0	-	+	-	-	-	+	0	+	+	+	+	-	0	+	+	-	-	-	-
Bitumen	+	+							+	+	+	0			-		+	+	0	+		
Boric acid, aqueous solution 10%		+	0		+		0	+	+	-	-	-	-	-	+	-	-	-	+	+	+	+
Butyl acetate	+	+	+	-	-	-	-	+	-	+	+	+	+	+	-	-	+	+	0	0	-	
Calcium chloride, solution 10%	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	
Chlorobenzene	+		+	0	0	-	-	-	+	0	+	+	+	+	-	-	+	+	0	-	-	
Chloroform	+	+	+	-	-	-	-	-	+	+	-	-	-	-	-	-	-	-	0	-	-	-
Cyclohexane	+	+	+	+	+	+	+	0	+	+	+	+	+	+	-	+	+	+	+	+	+	+
Cyclohexanone	+	+	+	-	-	-	-	-	+	0	+	+	+	+	-	-	+	+	+	+	+	+
Diesel oil	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	0	+	+	+
Dimethyl formamide	0	+	+		-	-	-	-	+	-	+	+	0	+	-	+	+	0	+	+	-	
Diethyl phthalate			+	+	0	+	+	0	+	0	+	+	+	+	0	+	+	+	+	+	+	+
Dioxane	+	+	+	+	0	-	-	-	+	+	+	+	+	+	-	0	0	0	+	+	0	0
Acetic acid, concentrated	0	0	+	-	+	+	-	+	0	-	-	-	-	-	-	-	-	-	0	0	-	+
Acetic acid, aqueous solution 10%	+	+	+	+	+	+	+	+	+	-	-	0	-	+	0	+	0	+	+	+	+	+
Acetic acid, aqueous solution 5%	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+
Ethanol 96%	+	+	+	+	+	+	+	+	+	+	0	0	0	0	0	+	+	+	+	+	+	+
Ethyl acetate	+	+	+	0	-	0	-	+	0	+	+	+	+	+	-	0	+	+	+	+	+	+
Ethyl ether	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	
Ethylene chloride	+			+					+	+	+	0	+	-	-	-	-	-	+	0	-	
Hydrofluoric acid, 40%			-	0	-	-	-	-	0	+	-	-	-	-	-	-	-	-	+	+	0	+
Formaldehyde, aqueous solution 30%		+	+	+	+	+	+	+	+	+	0	0	0	0	+	+	+	+	+	+	+	+
Formamide			+						+	+	+	0	+	+	+	0	+	0	+	+	+	+
Freon, Frigen, liquid	+	-	-	+		+		+	+	+	+	+	+	+	-	+	+	+	-	0	0	+
Fruit juices	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	0	+	+	+	+
Glykol	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	0	0	0	+	+	+	+
Glycantine, aqueous solution 40%	+	+	+	+		+		+	+	+	+	+	+		+	+	+	+	+	+	+	+
Glycerine	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+
Urea, aqueous solution	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Heating oil	+	+	+	+		+	+	0	+	+	+	+	+	+	0	+	+	+	0	+	+	+
Heptane, Hexane	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+
Iso-octane	+	+	+	+	+	+	0	+	+	+	+	+	+	+			+	+	+	+	+	+
Isopropanol	+		+	+	+	+	0	+	+	+	+	0	+	-	0	+	+	+	+	0	+	+
Iodine solution, alcohol solution	+		0				+	0	+	+	-	-	-	-	-	-		0	+	+	0	+
Potassium lye, aqueous 50%	-	+	+	+		+	+	0	+	0	0	0	0	0	-	-	+	-	+	+	+	+
Potassium lye, aqueous 10%	0		+	+	0	+	+	+	+	0	+	+	+	+	-	-	+	-	+	+	+	+
Potassium dichromate, aqueous solution 10%	-								+	+	+	+	0		+	+	+	0	+	+	+	+

+ resistant 0 limited resistance - not resistant (also dependent on concentration, time and temperature)

	TECASINT (PI)	TECAPEEK HT, ST (PEK, PEKEK)	TECAPEEK (PEEK)	TECATRON (PPS)	TECAPEI (PEI)	TECASON E (PES)	TECASON P (PPSU)	TECASON S (PSU)	TECAFLON PTFE (TF)	TECAFLON PVDF (PVDF)	TECAMID 6 (PA6)	TECAMID 46, 66 (PA46, 66)	TECAMID 11, 12 (PA11, 12)	TECARIM (PA6 C + elastomer)	TECANAT (PC)	TECAPET (PET), TECADUR PBT (PBT)	TECAFORM AH (POM-C)	TECAFORM AD (POM-H)	TECAFINE PP (PP)	TECAFINE PE (PE)	TECARAN ABS (ABS)	TECANYL (PPE)	
Potassium permanganate, aqueous solution 1%	+	+	+	+	+		+	+	+	+	-	-	-	-	+	+	+	+	+	+	+	+	+
Cupric sulphate, 10%	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	-	+	+	+	+	+
Linseed oil	+		+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Methanol	+		+	+	0	+	0	0	+	0	+	+	0	+	-	+	+	+	+	+	+	0	+
Methyl ethyl ketone	+	+	+	+	-	-	0	-	+	0	+	+	+	+	-	0	0	0	0	0	0	-	-
Methylene chloride	+		+	0		-	-	-	+	+	0	0	-	0	-	-	0	0	-	0	-	-	-
Milk	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Lactic acid, aqueous solution 90%	+	+	+	+	0				+	+	-	-	0	-	+	+	+	-	+	+	-	-	
Lactic acid, aqueous solution 10%	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	
Sodium bisulphite, aqueous solution 10%	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+	
Sodium carbonate, aqueous solution 10%	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Sodium chloride, aqueous solution 10%	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+	-	-	+	+	+		
Sodium nitrate, aqueous solution 10%	+		+						+	+	+	+	+	+	0	+	+	+	+	+	+	+	+
Sodium thiosulphate 10%	+	+	+				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Soda lye, aqueous 5%	0		+	+	0	+	+	+	+	0	+	+	+	+	-	0	+	-	+	+	+	+	+
Soda lye, aqueous 50%	-	+	+	+	-	+	+	+	0	0	0	0	0	0	-	-	+	-	+	+	+	+	+
Nitrobenzene	+		0	0		-			+	0	-	-	-	-	-	0	0	0	+	+	-		
Oxalic acid, aqueous solution 10%	+	+	+	+		+	+	+	+	+	0	0	0	0	+	+	-		+	+	+	+	+
Ozone	0	+					+	+	+	+	-	-	-	-	+	0	-	-		0			
Paraffin oil	+		+	+	+	+	+		+	+	+	+	+	+	-	+	+	+	+	+	+	+	+
Perchloroethylene	+		+	+	+	-	0	-	+	+	0	0	-	0	-	0	0	0	-	-	0		
Petroleum	+	+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+
Phenol, aqueous solution	+		0	+		-	-	-	+	+	-	-	-	-	-	-	-	-	+	+	+	+	+
Phosphoric acid, concentrated	0	+	+	+			+	+	+	-	-	-	-	-	+				+	+	+		
Phosphoric acid, aqueous solution 10%	0	+	+	+	+		+	+	+	+	-	-	-	-	+	+	0	-	+	+	+	+	+
Propanol	+		+		+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+
Pyridine	-	+	0	-	-				+	0	+	+	0	+	-		0	0	0	0	-		
Salicylic acid	+		-						+	+	+	+	+	+		0	-			+	+		
Nitric acid, aqueous solution 2%	+	+	+	+	+	+	+	+	+	+	-	-	-	-	0	+	-	-	+	+	+	+	-
Hydrochloric acid, aqueous solution 2%	+	+	+	+	+	+	+	+	+	+	-	-	0	-	+	+	-	-	+	+	+	+	+
Hydrochloric acid, aqueous solution 36%	-	+	+	0	+	+	0		+	-	-	-	-	0	-	-	-	-	+	+	+	+	+
Sulphur dioxide	+		+	+		0			+	+	+	+	+	+	-	+	+	+	0	0	-		
Sulphuric acid, concentrated 98%	-	-	-	+	-	-	-	-	+	0	-	-	-	-	-	-	-	-	+	0	-	-	-
Sulphuric acid, aqueous solution 2%	+	+	+	+	+	+	+	+	+	+	-	-	-	-	+	+	+	-	+	+	+	+	+
Hydrogen sulphide, saturated			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	+	+
Soap solution, aqueous solution	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Silicone oils	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Soda solution, aqueous solution 10%	0								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Edible fats, Edible oils	+	+	+	+	+	+	0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Styrene	+		+						+	0	+	+	+	+	-	0	+	+	0	0			-
Tar	+		+	+	+				+	0	0	0	0	0	+	+	+	+	+	+	+	+	+
Carbon tetrachloride	+		+	+	+	0	-	+	+	+	+	+	-	+	-	+	0	0	-	-	-	-	-
Tetrahydrofurane	+		+	+	+	-	-		+	0	+	+	+	+	-	0	0	0	0	0	0	-	-
Tetralin	+		+						+	+	+	+	+	+	-	+	0			0	-		
Toluene	+	+	+	0	-	-	0	-	+	+	+	+	+	+	-	0	+	0	+	0	+	0	-
Transformer oil	+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+	+	+
Triethanolamine	-		0	0					+	0	+	+	+	+	-	+	+	-	+	+	+	+	+
Trichloroethylene	+	+	+	0	-	-	-	-	+	+	0	0	0	0	-	-	-	-	0	0	-	-	-
Vaseline	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	0	+	+
Wax, molten	+	+	+		+	+			+	+	+	+	+	+	+	+	+	+	+	0	0		+
Water, cold	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Water, warm	-	+	+	+	+	+	+	+	+	0	0	0	0	0	0	-	0	-	0	0	0	+	+
Hydrogen peroxide, aqueous solution 30%	-	0	0		+	+	+	+	0	-	-	-	-	-	+	+	-	-	+	+	+	+	+
Hydrogen peroxide, aqueous solution 0,5%	+		+	+	+	+	+	+	+	+	-	-	-	-	+	+	+	0	+	+	+	+	+
Wine, Brandy	+		+		+	+	+	+	+	0	0	0	0	0	+	+	+	+	+	+	+	+	+
Tartaric acid	+	+	+		+				+	+	+	+	+	+	+	+	0	0	+	+	+	+	+
Xylene	+	+	+	+	-	0	0	-	+	+	+	+	0	+	-	0	+	+	-	-	-	-	-
Zink chloride, aqueous solution 10%	+	+	+	+	+	+	+	+	+	+	0	0	0	0	+	+	+	-	+	+	+	+	+
Citric acid, aqueous solution 10%	+	+	+		+	+	0	+	+	0	0	0	0	0	+	+	0	-	+	+	+	+	+

+ resistant 0 limited resistance - not resistant (also dependent on concentration, time and temperature)