

Chemical resistance of SMC

Material	Concentration	see below	Lastingness at RT	Lastingness at 50 °C
Acetone			0	0
Adipic acid	diluted solution		+++	+++
Battery acid	Sulphuric acid			
Alcohol	Ethanol			
Aluminium chloride			+++	+++
Aluminium nitrate			+++	+++
Aluminium sulphate			+++	+++
Formic acid	10%		+++	+++
Formic acid	85%		++	0
Ammonia	5%		0	0
Ammonia	conc.		0	0
Ammonium carbonate			+++	+
Ammonium chloride			+++	+++
Ammonium fluoride			+++	-
Ammonium nitrate			+++	+++
Ammonium sulphate			+++	+++
Aniline			0	0
ATF-oils			+++	++
Ethanol	96%		+++	+
Ethanol	50%		+++	+++
Ethylen glycol			+++	+++
Barium carbonate			+++	+
Barium chloride			+++	+++
Barium hydroxide	10%		+++	+
Barium sulphate			+++	+++
Barium sulfide			++	+
Benzine (without methanol)			+++	+++
Benzoic acid			+++	+++
Benzole			++	+
Beer			+++	-
Hydrocyanic acid	10%		+++	++
Lead acetate			+++	+++
Boron acide			+++	+++
Bromine			0	0
Bromine hydrogen oxid	50%		++	+
Butanone-2			+	0
Butyric acid			+++	+++
Butyl acetate			+	0
Butyl alcohol			+++	++
Chlorine			+++	++
Bleaching chloride liquid	15%		+++	-
Chloracetic acid	10%		+++	+++
Chloracetic acid	100%		++	+
Chloroform			0	0
Chlorine water	saturated		++	+
Chromic acid	5%		+++	++
Chromic acid	10%		+++	++
Chromic acid	20%		+	0
Chromic acid	30%		+	0
Diallyl phtalat			+++	+++
Dibutyl phtalat			+++	+++
Methylene chloride			+	0
Ethylene chloride			0	0
Diesel oil			+++	++

Iron nitrate			+++	+++
Iron sulphate			+++	+++
Acidum aceticum	5%		+++	+++
Acidum aceticum	5%		+++	+++
Acidum aceticum	5%		+++	+++
Iron acid hydride			0	0
Fatty acids			+++	+++
Hydrogen fluoride			++	0
Hydrogen fluoride acid	10%		++	0
Hydrogen fluoride acid	20%		+	0
Formalin	10%		+++	++
Formalin	37%		+++	+
Frigen 113			++	-
Glucose			+++	+++
Glycol		Ethylene glycol		
Glycerin			+++	+++
Hydraulical oil			+++	++
Isopropanol			+++	++
Potassium bicarbonate	10%		+++	+++
Potassium bichromate			+++	+++
Potassium bromide			+++	+++
Potassium chloride			+++	+++
Potassium hydroxide	5%		++	+
Potassium hydroxide	10%		+	0
Potassium hydroxide	20%		+	0
Potassium nitrate			+++	+++
Potassium sulphate			+++	+++
Calcium chloride			+++	+++
Calcium hydroxide	20%		+++	++
Calcium nitrate			+++	+++
Calcium sulphate			+++	+++
Aqua regia			0	0
Cresol			0	0
Copper chloride			+++	+++
Copper nitrate			+++	+++
Copper sulphate			+++	+++
Magnesium carbonate			+++	+++
Magnesium chloride			+++	+++
Magnesium nitrate			+++	+++
Magnesium sulphate			+++	+++
Malein acid	40%		+++	++
Methanol			+	0
Butanone		Butanone	++	0
Methylene chloride		Dichloromethane		
Lactic acid	conc.		+++	+++
Monostyrol		Styrol		
Engine oil			+++	+++
Sodium acetate			+++	+++
Sodium bicarbonate			+++	+++
Sodium bichromate			+++	+++
Sodium bisulphate			+++	+++
Sodium bromide			+++	+++
Sodium carbonate	10%		+++	+
Sodium chloride			+++	+++
Sodium chlorite	3%		+++	-
Sodium cyanide	10%		+++	-
Sodium hypochlorite	10%		+++	+++
Sodium hydroxide	5%		++	+

Sodium hydroxide	conc.		+	0
Sodium nitrate			+++	+++
Sodium nitrite			+++	+++
Sodium silicate			+++	+++
Sodium thiosulphate			+++	-
Natriumthiosulfat	30%		+++	+++
Sodium hydroxide	Sodium hydroxide			
Oelic acid			+++	+++
Oxalic acid			+++	+++
Phenol			0	0
Phosphorus acid	10%		+++	++
Phosphorus acid	30%		+++	++
Phosphorus acid	conc.		+++	+
Volatil caustic	Ammonia			
Nitric acid	10%		+++	++
Nitric acid	20%		++	+
Nitric acid	10%		+++	++
Nitric acid	20%		++	+
Nitric acid	conc.		+	0
Sulphuric acid	10%		++	++
Sulphuric acid	30%		++	+
Sulphuric acid	70%		++	+
Sulphuric acid	conc.		+	0
Soap			+++	+++
Silver nitrate			+++	+++
Stearin acid			+++	+++
Styrol monomer			++	0
Test petrol			+++	+++
Tetrachlorocarbone			++	-
Tetrahydrofurane			0	0
Toluene			++	0
Trichlorin ethylene			+	0
Water			+++	+++
Water glass	5%		++	-
Hydrogen peroxide	3%		+++	+++
Hydrogen peroxide	30%		+++	++
Tartaric acid			+++	+++
Xylene			++	0
Zinc chloride			+++	+++
Zinc sulphate			+++	+++
Tin chloride			+++	+++
Citric acid			+++	+++

+++ The resin matrix is in the given temperature band constant, mechanical attributes stay constant.

++ At longer impacting time are discolorations and damages of the surface of the part possible, stability characteristics will remain unchanged.

+ At longerer impacting time of the medium, the resin matrix will be attacked, this has to be therefore avoided, is thereforeBei längerer Einwirkungszeit des Mediums wird die Harzmatrix angegriffen und sind deshalb zu vermeiden, you have to reckon with mit falling stability characteristics.

0 The resin matrix will by impact of the media destroyed, a use should be avoided.