

chemical resistance table

tabelle der chemischen beständigkeiten

The following data are based on tests and believed to be reliable; however the tabulation should be used as a guide ONLY, since it does not take into consideration all variables that may be encountered in actual use. All critical applications should be tested.

Die folgenden Angaben beruhen auf Tests und werden als zuverlässig gehalten. Allerdings sollte die Aufstellung NUR als Richtwert betrachtet werden, da nicht alle Variablen der möglichen Einsätze berücksichtigt sind. Alle kritischen Anwendungen sollten geprüft werden.

PVC - P

FITT MULTIFLEX XTREME
FITT OILFLEX
FITT METALFLEX
FITT ENOFLEX
FITT ENOFLEX SF
FITT AGROFLEX LD
FITT AGROFLEX HD
FITT AGROFLEX UV-R LD
FITT AGROFLEX UV-R HD
FITT SUPERELASTIC
FITT ALIFLEX LD
FITT ALIFLEX
FITT ALIFLEX MEDIUM
FITT LIGHTFLEX
FITT LIGHTFLEX BK
FITT ASPIRFLEX
FITT ASPIRFLEX PLUS
FITT ASPIRTECH
FITT B ACTIVE
FITT IDROFLEX
FITT BARRIER CDS
FITT EXTRA WHITE
FITT REFITTEX WHITE
FITT CLEANY HOSE
FITT REFITTEX 80 BAR
FITT REFITTEX 40 BAR
FITT REFITTEX 20 BAR ULTRAFLEX
FITT REFITTEX 20 BAR C
FITT REFITTEX 20 BAR
FITT AIR HOSE KIT
FITT REFITTEX CRISTALLO
FITT REFITTEX CRISTALLO C
FITT REFITTEX MARINE
FITT CRISTALLO EXTRA
FITT AQUARIUM
FITT REFITTEX FUEL
FITT REFITTEX GAS GPL
FITT REFITTEX GAS METANO
FITT REFITTEX GAS EN 16436-1
FITT PROFY
FITT FLAT HD
FITT FLAT LD
FITT MULTIFLEX XTREME WIRE
FITT NTS MASTERPLUS
FITT NTS WATER
FITT NTS MARINE
FITT NTS WORK
FITT CAPTIVE GREY
FITT CAPTIVE WHITE

EVA

FITT EVAPOOL

PU

FITT MULTIFLEX PU
FITT MULTIFLEX PU WIRE
FITT ALIFLEX PU WIRE
FITT VENFLEX PU LD
FITT REFITTEX PU 20 BAR

▲ Very good - sehr gut

● Good - gut

■ Poor - mangelhaft

★ Not suitable - ungeeignet

	PVC-P	EVA	PU
Acetaldehyde C_2H_4O	■	★	
Acetamide C_2H_5NO	■		
Acetic acid (10 RT) $C_2H_4O_2$	●		
Acetic acid (50 RT) $C_2H_4O_2$	★		■
Acetic acid (50-70 RT) $C_2H_4O_2$	★	■ ●	
Acetic acid (100 RT) $C_2H_4O_2$	★	●	
Acetic anhydride $C_4H_6O_3$	★	●	
Acetone C_3H_6O	★	★	■
Acetylene C_2H_2	▲		
Acrylonitrile C_3H_3N	★		
Aluminum acetate	▲	▲	
Aluminum bromide $AlBr_3$	●	▲	
Aluminum chloride $AlCl_3$	●	▲	
Aluminum fluoride AlF_3	●	▲	
Aluminum nitrate $Al(NO_3)_3$	●	▲	
Aluminum sulfate $Al_2(SO_4)_3$	▲	▲	
Ammonia (anhydrous) NH_3	●	▲	
Ammonia gas	■		
Ammonia liquid	●		
Ammonium carbonate $(NH_4)_2CO_3H_2O$	▲	▲	
Ammonium chloride NH_4Cl	▲	▲	
Ammonium hydrazide H_5NO	●	▲	●
Ammonium nitrate NH_4NO_3	●	▲	
Ammonium nitrite $H_3N.HNO_3$	●	▲	
Ammonium persulfate $O_8S_2ZN_4N$	●	▲	
Ammonium phosphate $(NH_4)_3PO_4$	●	▲	
Ammonium sulfate $(NH_4)_2SO_4$	▲	▲	
Amyl acetate $C_7H_{14}O_2$	★	★	
Amyl alcohol $C_5H_{12}O$	■	★	
Amyl borate			
Amyl naphthalene			
Aniline C_6H_5N	★	★	■
Aniline dyes	▲		
Animal oil (lard oil)	■		
Aqua regia	★	★	
Arsenic acid H_3AsO_4	●		
Asphalt	▲		
ASTM oil n. 1	■		●
ASTM oil n. 2	■		●
ASTM oil n. 3	■		●
ASTM reference fuel A		★	●
ASTM reference fuel B		★	●
ASTM reference fuel C		★	●
Barium chloride $BaCl_3$	▲	▲	
Barium Hydroxide $Ba(OH)_2$	▲	▲	
Barium sulfate $BaSO_4$	▲	▲	
Barium sulfide	●	▲	
Benzaldehyde C_7H_6O	★		★
Benzene (Benzol) C_6H_6	★	★	■
Benzine	●		
Benzyl alcohol $C_6H_5CH_2$	★		
Benzyl benzonate $C_9H_{10}O_2$	●		
Benzyl chloride C_7H_7Cl	★		
Boric acid H_3BO_3	●		
Bromine Br	★		
Butane C_4H_{10}	●		●
Butyl acetate	★		★
Butyl acrylate	★		
Butyl alcohol $C_4H_{10}O$	★		●
Butyl stearate	●		
Calcium acetate $Ca(CH_3CO_2)_2$	▲	▲	
Calcium disulfite	▲	▲	
Calcium chloride $CaCl_2$	▲	▲	
Calcium hydroxide $Ca(OH)_2$	▲	▲	
Calcium hypochlorite	▲	▲	

	PVC-P	EVA	PU		PVC-P	EVA	PU
Calcium nitrate $\text{Ca}(\text{NO}_3)_2$	▲	▲		Ethyl mercaptan	★		
Calcium sulfide CaS	▲	▲		Ethyl oxalate	★		
Carbitol	★			Ethyl silicate	★		
Carbon dioxide CO_2	▲			Fatty acid	▲		
Carbon disulfide CS_2	★		●	Ferric chloride FeCl_3	▲	■	
Carbonic acid H_2CO_3	●			Ferric nitrate $\text{Fe}(\text{NO}_3)_3$	▲	■	
Carbon tetrachloride CCl_4	★		■	Ferric sulfate FeSO_4	●		
Castor oil	■	★		Fluoroboric acid $\text{BF}_3 \cdot \text{H}_2\text{O}$	●		
Cellosolve $\text{C}_3\text{H}_8\text{O}_2$	★			Fluorobenzene	★		
Cellosolve Acetate $\text{CH}_3\text{CO}_2\text{CH}_2\text{CH}_2\text{OC}_2\text{H}_5$	★			Fluosilicic acid $\text{F}_6\text{Si}_2\text{H}$	●		
Cellosolve Butyl $\text{C}_6\text{H}_{14}\text{O}_2$	★			Formaldehyde CH_2O	●	●	
Chlorine gas (dry) Cl	■		★	Formic acid (25-RT) CH_2O_2	■		
Chlorine gas (wet) Cl	■		★	Formic acid (50-RT) CH_2O_2	★		
Chlorine liquide Cl	★			Formic acid (90-RT) CH_2O_2	★		
Chlorinated solvents	★	★		Freon 12			
Chloroacetic acid $\text{C}_2\text{H}_3\text{ClO}_2$	■			Freon 22			
Chloroacetone $\text{C}_3\text{H}_5\text{ClO}$	★			Fuel oil	★		
Chloroform CHCl_3	★			Furan furfural $\text{C}_4\text{H}_6\text{O}$	★		
Chloronaphthalene	★			Furtural $\text{C}_5\text{H}_6\text{O}_2$	★		
Chlorosulfonic acid HSO_3Cl	★			Gasoline	★	★	●
Chlorotoluene $\text{C}_7\text{H}_7\text{Cl}$	★			Gelatin	▲		
Chromic acid H_2CrO_4	●			Glauber's salt	▲		
Citric acid $\text{C}_6\text{H}_8\text{O}_7$	●		●	Glycerin $\text{C}_3\text{H}_8\text{O}_3$	■	●	●
Coconut oil	■			Grease	★		
Copper chloride CuCl_2	●			(n-)Hexaldehyde	★		
Copper cyanide CuCN	●			Hexane C_6H_{14}	★		●
Copper sulfate $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$	▲			Hexyl alcohol	■		
Corn oil	■			Hydrobromic acid	■ ●		
Cottonseed oil	■			Hydrobromic acid (20-70)	■		
Creosote oil	★			Hydrobromic acid (37-RT)	★	★	
Cresol $\text{C}_7\text{H}_8\text{O}$	■			Hydrochloric acid (10-RT) HCl	●		
Cyclohexane C_6H_{12}	★	★		Hydrochloric acid (20-RT) HCl	●		
Cyclohexanol $\text{C}_6\text{H}_{12}\text{O}$	★	★	●	Hydrochloric acid (20-80) HCl	★		
Cyclohexanone $\text{C}_6\text{H}_{10}\text{O}$	★	★	★	Hydrochloric acid (38-RT) HCl	■	■	★
Developing solution(Hypos)	●			Hydrocyanic acid HCN	●		
Dibenzl ether	★			Hydrofluoric acid (10-RT) HCN	●		
Dibutyl ether	★			Hydrofluoric acid (20-RT) HCN	■		
Dibutyl phthalate(DBP) $\text{C}_{16}\text{H}_{22}\text{O}_4$	★		■	Hydrofluoric acid (40-RT) HCN	★		
Dichlorobenzene $\text{C}_6\text{H}_4\text{Cl}_2$	★			Hydrofluoric acid anhydrous	★		
Diethylene glycol $\text{C}_4\text{H}_{10}\text{O}_3$	★	▲		Hydrogen H	▲		
Diethyl ether $\text{C}_4\text{H}_{10}\text{O}$	★	★	●	Hydrogen peroxide (5-RT) H_2O_2	●	●	■
Diethyl sebacate (DES)	★			Hydrogen peroxide (5-50) H_2O_2	●	●	■
Diisopropyl ketone	★			Hydrogen peroxide (30-RT) H_2O_2	●	●	■
Dimethyl aniline $\text{C}_6\text{H}_5\text{N}$	★			Hydrogen sulfide H_2S	●		
Dimethyl formamide $\text{C}_3\text{H}_7\text{NO}$	★		★	Hydroquinone $\text{C}_6\text{H}_6\text{O}_2$	●		
Diocetyl phthalate(DOP) $\text{C}_{24}\text{H}_{38}\text{O}_4$	★		■	Hypochlorous acid HClO	●		
Diocetyl sebacate(DOS)	★			Isobutyl alcohol $\text{C}_6\text{H}_{10}\text{O}$	★		
Dioxane $\text{C}_4\text{H}_8\text{O}_2$	★	★	●	Isooctane C_8H_{18}	★		●
Diphenyl $\text{C}_{12}\text{H}_{10}$		★		Isopropyl acetate $\text{C}_5\text{H}_{10}\text{O}_2$	★		
Diphenyl oxide	★			Isopropyl alcohol $\text{C}_3\text{H}_8\text{O}$	★		
Epichlorohydrine $\text{C}_3\text{H}_5\text{ClO}$	★			Isopropyl ether $\text{C}_6\text{H}_{14}\text{O}$	★		
Ethanolamine $\text{C}_2\text{H}_7\text{NO}$	★			Kerosene	■ ●		
Ethyl acetate $\text{C}_4\text{H}_8\text{O}_2$	★	★	■	Lacquer	★		
Ethyl acetoacetate $\text{C}_6\text{H}_{10}\text{O}_3$	★			Lactid acid $\text{C}_3\text{H}_6\text{O}_3$	●		
Ethyl acrylate $\text{C}_4\text{H}_6\text{O}_2$	★			Lard	■		
Ethyl alcohol $\text{C}_2\text{H}_6\text{O}$	★	●	■ ●	Lead acetate $\text{Pb}(\text{CH}_3\text{COO})_2$	●		
Ethyl benzene C_8H_{10}	★			Lead nitrate $\text{Pb}(\text{NO}_3)_2$	●		
Ethyl cellulose	★			Lead sulfamate	●		
Ethyl chloride $\text{C}_2\text{H}_5\text{Cl}$	★		★	Linoleic acid $\text{C}_{18}\text{H}_{30}\text{O}_2$	●		
Ethylene chlorohydine $\text{C}_2\text{H}_5\text{ClO}$	★			Linseed oil	■		
Ethylene diamine $\text{C}_2\text{H}_8\text{N}_2$	★			Liquilide petroleum gas	■		
Ethylene dichloride $\text{C}_2\text{H}_4\text{Cl}_2$	★			Lubricatig oil	■		
Ethylene glycol $\text{C}_2\text{H}_6\text{O}_2$	★		●	Magnesium chloride MgCl_2	▲		
Ethylene oxide $\text{C}_2\text{H}_4\text{O}$	★			Magnesium hydroxide Mg(OH)_2	▲		
Ethyl ether $\text{C}_4\text{H}_{10}\text{O}$	▲		●	Magnesium sulfate MgSO_4	▲		

	PVC-P	EVA	PU		PVC-P	EVA	PU
Maleic acid $C_4H_4O_4$	●			Silicone greases	■		
Malic acid $C_4H_6O_5$	●			Silicone oil	■		
Mercuric chloride $HgCl_2$	●			Silver nitrate $AgNO_3$	●		
Mercury Hg	▲			Soap solution	▲		
Methyl acetate $C_3H_6O_2$	★			Soda ash	▲		
Methyl alcohol CH_3O	★	●	●	Sodium bicarbonate	▲	▲	
Methyl chloride CH_3Cl	★		★	Sodium bisulfate	●	▲	
Methyl ethyl ketone(MEK)	★	★	■	Sodium bisulfite HO_3SNa	●	▲	
Methyl methacrylate $C_5H_8O_2$	★			Sodium chloride $NaCl$	▲		
Methyl isobutyl ketone $C_6H_{12}O$	★			Sodium cyanide $NaCN$	▲		
Methylene dichloride	★	★		Sodium hydroxide (10-RT) $NaOH$	●	▲	●
Mineral oil	■	★		Sodium hydroxide (30-RT) $NaOH$	●	▲	■
Monochlorobenzen	★	★		Sodium hydroxide (30-70) $NaOH$	★		
Monoethanolamine	●			Sodium hypochlorite (5-RT) $NaClO$	●		
Naphtha	■	■		Sodium hypochlorite (5-70) $NaClO$	■		
Naphthalene $O_{10}H_8$	●			Sodium metaphosphate $NaPO_3$	▲		
Naphthenic acid	●			Sodium nitrate $NaNO_3$	▲		
Natural gas	▲			Sodium perborate	●		
Nickel acetate	●			Sodium peroxide Na_2O_2	●		
Nickel chloride $NiCl_2$	▲			Sodium phosphate	▲		
Nickel sulfate $NiSO_4$	▲			Sodium thiosulfate $Na_2S_2O_3$	▲		
Nitric acid (10-RT) HNO_3	●		■	Sodium sulfite Na_2S	●		
Nitric acid (10-70) HNO_3	■			Soybean oil	■		
Nitric acid (30-RT) HNO_3	■		★	Stannic chloride $SnCl_2$	●		
Nitric acid (30-70) HNO_3	★			Steam H_2O	★		
Nitric acid (61.3-RT) HNO_3	★			Stearic acid $C_{18}H_{36}O_2$	●		
Nitric acid HNO_3	★			Styrene C_8H_8	★		■
Nitrobenzen $C_6H_5NO_2$	★		■	Sulfur S	●		
Nitroethane $C_2H_5NO_2$	★			Sulfur chloride			
Nitromethane CH_3NO_2	★			Sulfur dioxide SO_2	▲		●
Nitropropane	★			Sulfuric acid (10-RT) H_2SO_4	▲		■
Nitrogen N	▲			Sulfuric acid (10-70) H_2SO_4	★		
Octyl alcohol	■			Sulfuric acid (30-RT) H_2SO_4	●	■	★
Oleic acid $C_{18}H_{34}O_2$	■		●	Sulfuric acid (30-70) H_2SO_4	★	★	
Olive oil	■			Sulfuric acid (98-RT) H_2SO_4	★	★	★
Oxalic acid $C_2H_4O_4$	●		●	Sulfuric acid H_2SO_4	★	★	
Oxygen O	▲			Sulfurous acid (10-RT) H_2SO_3	●		
Ozone O_3	●			Tannic acid $C_{14}H_{10}O_9$	●		●
Palmitic acid $C_{16}H_{32}O_2$	●			Tar	★		
Perchloric acid $HClO_4$	●			Tartaric acid $C_4H_6O_6$	●		
Perchloroethylene	★			Tetrachloroethane CCl_4	★		
Petroleum	■		●	Tetraethyl lead $Pb(C_2H_5)_4$	■		
Phenyl hydrazine $C_6H_8N_2$	★			Tetrahydrofuran C_4H_8O	★	★	■
Phenol C_6H_6O	★	★	●	Tetralin $C_{10}H_{12}$	★		
Phosphoric acid (50-RT) H_3PO_4	▲			Thionyl chloride $TiCl_2$	★		
Phosphoric acid (50-70) H_3PO_4	■			Toluene C_7H_8	★	★	■
Phosphoric acid (75-RT) H_3PO_4	●			Tributyl phosphate $C_{12}H_{27}O_4P$	★		
Pickling solution	●			Trichloroethylene C_2HCl_3	★	★	■
Picric acid $C_6H_3N_3O_7$	★			Tricresyl phosphate	★		■
Pinene	★			Triethanol amine $C_6H_{15}NO_3$	■		
Pine oil	★			Turpentine oil	●		●
Potassium chloride KCl	▲	▲		Vegetable oil	■		●
Potassium cyanide KCN	▲	▲		Vinegar	●		
Potassium dichromate $K_2Cr_2O_7$	▲	▲		Water H_2O	▲		
Potassium hydroxide KOH	▲			Xylene C_8H_{10}	★	★	■
Potassium permanganate $KMnO_4$	●	■		Zinc acetate	▲		
Potassium sulfate K_2SO_4	▲	▲		Zinc chloride $ZnCl_2$	▲		
Propane $CH_3CH_2CH_3$	▲			Zinc sulfate ZnS	▲		
Propyl acetate $C_5H_{10}O_2$	★						
Propyl alcohol $CH_3(CH_2)_2OH$	★	●					
Propylene $CH(CH_3)CH_2$	■						
Pyridine C_5H_5N	★		■				
Salicylic acid $C_7H_6O_3$	▲						
Salt water	▲						
Silicate ester	●						