

Plastics and stainless steel V4A

Resistance to chemicals

| Substances (+20°) | Conc. | PTFE | PEHD | PP | PFA | V4A |
|-------------------------|----------|------|------|----|-----|-----|
| Acetaldehyde | 100,00 % | A | B | C | A | A |
| Acetamide | 100,00 % | A | A | A | A | A |
| Acetamide | 100,00 % | A | A | A | A | A |
| Acetic acid | 100,00 % | A | C | B | A | A |
| Acetic acid | 90,00 % | A | A | A | - | A |
| Acetic acid allyl ester | 100,00 % | A | A | C | A | A |
| Acetic acid butyl ester | 100,00 % | A | B | C | A | A |
| Acetic acid-2-pentyl | 100,00 % | A | B | C | A | A |
| Acetic anhydride | 100,00 % | A | C | B | A | A |
| Acetic anhydride | 100,00 % | A | C | B | A | A |
| acetone | 100,00 % | A | A | A | A | A |
| Acetonitrile | 100,00 % | A | A | A | A | A |
| Acetophenone | 100,00 % | A | C | B | A | A |
| Acetyl chloride | 100,00 % | A | C | B | A | B |
| Acetyl chloride | 100,00 % | A | C | C | - | A/C |
| Acrylonitrile | 100,00 % | A | A | A | A | A |
| Adipic acid | 100,00 % | A | A | A | A | B |
| Allyl acetate | 100,00 % | A | A | B | - | A |
| Allyl chloride | 100,00 % | A | B | C | A | B |
| Aminoacetic acid | 10,00 % | A | A | A | - | B |
| Aminobenzene | 100,00 % | A | A | A | A | A |
| Aminomethane | 100,00 % | A | A | A | A | A |
| Ammonium hydroxide | 25,00 % | A | A | A | A | A |
| Amyl acetate | 100,00 % | A | A | B | A | A |
| Amyl alcohol | 100,00 % | A | A | A | A | A |
| Aniline | 100,00 % | A | A | A | A | A |
| Anisole | 100,00 % | A | B | B | A | A |
| Aqua regia | 100,00 % | A | C | C | - | C |
| Aviation fuel | 100,00 % | A | C | B | A | A |
| Benzaldehyde | 100,00 % | A | B | A | A | A |
| Benzene | 100,00 % | A | B | B | A | A |
| Benzenesulfonic acid | 100,00 % | A | A | A | A | A |
| Benzoic acid | 100,00 % | A | A | A | A | A |
| Benzoyl chloride | 100,00 % | A | C | C | A | B |
| Benzyl alcohol | 100,00 % | A | A | A | - | A |
| Benzyl chloride | 100,00 % | A | C | C | A | B |
| Boric acid | 100,00 % | A | A | A | A | A |
| Buta-1,3-diene | 100,00 % | A | C | C | A | A |
| Butan-2-on | 100,00 % | A | C | C | A | A |
| Butanedioic acid | 100,00 % | A | A | A | - | A |
| Butanol | 100,00 % | A | A | A | A | A |
| Butenedioic acid | 100,00 % | A | A | A | A | A |
| Buthylphenol, tert. | 100,00 % | A | B | B | A | A |
| Butyl acetate | 100,00 % | A | C(B) | C | A | A |
| Butyl alcohol | 100,00 % | A | A | A | A | A |
| Butyl ether | 100,00 % | A | C | C | A | A |
| Butyric acid | 100,00 % | A | C | A | A | A |
| Butyric acid | 100,00 % | A | C | A | A | A |
| Camphor | 100,00 % | A | C | B | A | A |
| Carbolic acid | 100,00 % | A | A | A | A | A |
| Carbon disulfide | 100,00 % | A | C | C | A | A |
| Carbon disulfide | 100,00 % | A | C | C | A | A |
| Carbon tetrachloride | 100,00 % | A | C | C | A | B |
| Caustic soda | 85,00 % | A | A | A | A | B |

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|--|----------|------|------|----|-----|-----|
| Caustic soda | 85,00 % | A | A | A | A | A/B |
| Chloral hydrate | 100,00 % | A | B | C | - | - |
| Chlorine | 100,00 % | A | C | C | A | C |
| Chloroacetic acid | 100,00 % | A | A | A | A | C |
| Chlorobenzene | 100,00 % | A | C | C | A | A |
| Chloroethane | 100,00 % | A | B | C | A | B |
| Chloroethanol-2 | 100,00 % | A | A | A | A | B |
| Chloroform (trichloromethane) | 100,00 % | A | C | C | A | A |
| Chlorosulfuric acid | 100,00 % | A | C | C | A | C |
| Chlorotoluene | 100,00 % | A | C | B | A | A |
| Chromic acid | 50,00 % | A | C | B | A | B |
| Chromic acid | <50,00% | A | B | B | A | B |
| Chromic sulfuric acid | 100,00 % | A | C | C | A | B |
| Citric acid | 10,00 % | A | A | A | A | A |
| Cumene | 100,00 % | A | B | C | A | A |
| Cyclohexane | 100,00 % | A | A | A | A | A |
| Cyclohexanol | 100,00 % | A | A | A | A | A |
| Cyclohexanone | 100,00 % | A | B | B | A | A |
| Decalin | 100,00 % | A | B | C | A | A |
| Decan | 100,00 % | A | C | B | A | A |
| Diacetone alcohol | 100,00 % | A | A | A | A | A |
| Diaminoethane | 100,00 % | A | A | A | A | A |
| Dibutyl ether | 100,00 % | A | C | C | A | A |
| Dichloroacetic acid (also monochloro-) | 100,00 % | A | A | A | A | - |
| Dichlorobenzene | 100,00 % | A | B | C | A | - |
| Dichloroethanes | 100,00 % | A | B | C | - | B |
| Dichloromethane (methylene chloride) | 100,00 % | A | C | C | A | B |
| Diesel fuel | 100,00 % | A | B | B | A | A |
| Diethyl ether | 100,00 % | A | C | C | A | A |
| Diethyl ketone | 100,00 % | A | B | B | A | A |
| Diethylamine | 100,00 % | A | C | A | A | A |
| Diethylene glycol | 100,00 % | A | A | A | - | A |
| Diethylene oxide | 100,00 % | A | A | C | A | - |
| Dihydroxybenzene-1,3 | 50,00 % | A | C | B | A | - |
| Diisobutylketone | 100,00 % | A | B | B | A | A |
| Dimethylformamid | 100,00 % | A | A | A | A | A |
| Dimethyl ether | 100,00 % | A | C | C | A | A |
| Dimethyl sulfoxide (DMSO) | 100,00 % | A | A | A | - | A |
| Dimethylamine | 100,00 % | A | B | B | A | A |
| Dimethylbenzenes | 100,00 % | A | C | C | A | A |
| Dinatriumtertraborat | 100,00 % | A | A | A | - | - |
| Dioxane | 100,00 % | A | A | B | A | A |
| Diphenyl ether | 100,00 % | A | C | C | A | A |
| Dipropylene glycol | 100,00 % | A | A | A | - | A |
| Ethanol (ethyl alcohol) | 96,00 % | A | A | A | A | A |
| Ethereal oils | 100,00 % | A | C | C | - | A |
| Ethyl acetate | 100,00 % | A | C | C | A | A |
| Ethyl acetate | 100,00 % | A | C | C | A | A |
| Ethyl acetate | 100,00 % | A | B | B | A | A |
| Ethyl acrylate | 100,00 % | A | C | C | A | A |
| Ethyl chloride | 100,00 % | A | C | C | A | A/C |

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|---------------------------------------|----------|------|------|------|-----|-----|
| Ethylbenzene | 100,00 % | A | B | C | A | A |
| Ethylene glycol | 100,00 % | A | A | A | A | A |
| Ethylene oxide | 100,00 % | A | B | B | A | A |
| Ethylenechlorohydrin | 100,00 % | A | A | A | A | A/C |
| Ethylenediamine | 100,00 % | A | A | A | A | A |
| Ethylmethylketone | 100,00 % | A | C | C | A | A |
| Fluosilicic acid | 100,00 % | A | A | A | A | A |
| Formaldehyde, formalin | 40,00 % | A | A | A | A | A |
| Formamide | 100,00 % | A | A | A | A | A |
| Formamide (Methanamide) | 100,00 % | A | A | A | A | A |
| Formic acid | 100,00 % | A | A | B | A | B |
| Fuel oils | 100,00 % | A | B | B | A | A |
| Furfural | 100,00 % | A | B | C | A | A |
| Gasoline, aromatic | 100,00 % | A | B | B | A | B |
| Glycerin | 100,00 % | A | A | A | - | A |
| Glycine | 10,00 % | A | A | A | - | A |
| Glycol | 100,00 % | A | A | A | A | A |
| Glycolic acid | 100,00 % | A | A | A | A | A/B |
| Heptane | 100,00 % | A | B | B | A | A |
| Hexadecanol | 100,00 % | A | A | A | A | A |
| Hexan-1,2,6-triol | 100,00 % | A | A | A | A | A |
| Hexane | 100,00 % | A | B | B | A | A |
| Hexanedioic acid (adipic acid) | 100,00 % | A | A | A | A | A |
| Hexanol | 100,00 % | A | A | A | A | A |
| Hydrazine hydrate | 64,00 % | A | A | A | A | A/B |
| Hydrochloric acid | 37,00 % | A | A | A | A | C |
| Hydrofluoric acid (hydrofluoric acid) | 45,00 % | A | A | A | A | C |
| Hydrogen peroxide | 90,00 % | A | B | B | A | A |
| Hydrogen sulfide | 100,00 % | A | A | A | A | A |
| Hydroxyacetic acid (glycolic acid) | 100,00 % | A | A | A | A | B |
| Isobutanol | 100,00 % | A | A | A | A | A |
| Isooctane | 100,00 % | A | B | B | A | A |
| Isopropanol | 100,00 % | A | A | A | A | A |
| Isopropenyl acetate | 100,00 % | A | A | A | A | - |
| Isopropyl acetate | 100,00 % | A | A | B | - | A |
| Isopropyl ether | 100,00 % | A | C | C | A | A |
| Isopropylbenzol | 100,00 % | A | C | C | A | - |
| Kerosene | 100,00 % | A | A | A | A | A |
| Lactic acid | 90,00 % | A | A | A | A | A/B |
| Menthol | 100,00 % | A | A | A | - | A |
| Methanol | 100,00 % | A | A | A | A | A |
| Methoxybenzene | 100,00 % | A | C | C | A | A |
| Methoxyethanol | 100,00 % | A | A | C | A | A |
| Methyl acetate | 100,00 % | A | A | A | A | A |
| Methyl Bromide | 100,00 % | A | C | C | A | A/C |
| Methyl ethyl ketone | 100,00 % | A | B | B | A | A |
| Methyl isobutyl ketone | 100,00 % | A | C | C | A | A |
| Methyl methacrylate | 100,00 % | A | A | A | A | A |
| Methyl phenyl ether | 100,00 % | A | C | C | A | A |
| Methylamine | 100,00 % | A | A | A | A | A |
| Methylbenzene | 100,00 % | A | C | C | A | A |
| Methylcyanide | 100,00 % | A | A | A | A | A |
| Methylene chloride | 100,00 % | A | C | C | A | A/C |
| Methylglycol | 100,00 % | A | A | B | A | A |
| Methyloxirane | 100,00 % | A | A | A | A | A |
| Methylpentanone | 100,00 % | A | C | C | A | A |
| Methylphenylketone | 100,00 % | A | C | C | A | A |
| Mineral oil | 100,00 % | A | A | B | - | A |
| Nitric acid | 65,00 % | A | B | C | A | B |
| Nitrobenzene | 100,00 % | A | C | B | A | A |
| Octane | 100,00 % | A | B | B | A | A |
| Oleic acid | 100,00 % | A | C(B) | C(B) | A | A |
| Oleic acid | 100,00 % | A | B | B | A | A |
| Oleum | 100,00 % | A | C | C | A | A |
| Oxalic acid | 100,00 % | A | A | A | A | A/B |
| Pentan-1-ol | 100,00 % | A | A | A | A | - |
| Pentan-3-on | 100,00 % | A | A | A | A | A |

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|------------------------|----------|------|------|----|-----|-----|
| Pentylacetate | 100,00 % | A | A | C | A | A |
| Perchlorethylene | 100,00 % | A | C | C | A | - |
| Perchloric acid | 100,00 % | A | B | C | A | - |
| Petroleum | 100,00 % | A | B | B | A | A |
| Phenol | 100,00 % | A | A | A | A | A |
| Phenylamine | 100,00 % | A | A | A | A | A |
| Phosphoric acid | 85,00 % | A | B | A | A | A/B |
| Phosphorus trichloride | 100,00 % | A | B | B | A | - |
| Potassium hydroxide | 100,00 % | A | A | A | A | A |
| Potassium hypochlorite | 20,00 % | A | B | B | A | B |
| Potassium perchlorate | 25,00 % | A | A | A | A | A |
| Propan-2-ol | 100,00 % | A | A | A | A | A |
| Propane-1,2-diol | 100,00 % | A | A | A | A | A |
| Propionic acid | 100,00 % | A | A | A | A | A |
| Propylene oxide | 100,00 % | A | A | A | A | A |
| Pyridine | 100,00 % | A | B | B | A | A |
| Resorcinol | 50,00 % | A | B | A | A | - |
| Salicylic acid | 100,00 % | A | A | A | A | A |
| Silicon Oils | 100,00 % | A | A | A | - | A |
| Silver acetate | 100,00 % | A | A | A | - | - |
| Sodium hydroxide | 85,00 % | A | A | A | A | A/B |
| Sodium persulfate | 25,00 % | A | A | B | A | A |
| Sodium persulfate | 100,00 % | A | A | A | A | A |
| Styrene | 100,00 % | A | C | C | A | A |
| Succinic acid | 100,00 % | A | A | A | A | A |
| Sulfuric acid | 80,00 % | A | A | A | A | B/C |
| Sulfuric acid fuming | 100,00 % | A | C | C | A | A |
| Tartaric acid | 100,00 % | A | A | A | A | A |
| Tetrachlorethylene | 100,00 % | A | C | C | A | - |
| Tetrachloroethane | 100,00 % | A | B | C | A | - |
| Tetrahydrofuran (THF) | 100,00 % | A | C | C | A | A |
| Tetrahydronaphthalene | 100,00 % | A | C | C | A | A |
| Tetralin | 100,00 % | A | C | C | A | A |
| Thionyl chloride | 100,00 % | A | C | C | A | - |
| Toluene | 100,00 % | A | C | C | A | A |
| Trichloroacetic acid | 100,00 % | A | B | A | A | B |
| Trichlorobenzenes | 100,00 % | A | C | C | A | - |
| Trichloroethylene | 100,00 % | A | C | C | A | B |
| Triethanolamine | 100,00 % | A | A | A | - | A |
| Triethylene glycol | 100,00 % | A | A | A | A | A |
| Turpentine | 100,00 % | A | B | C | A | A |
| Urea | 100,00 % | A | A | A | A | A |
| Uric acid | 100,00 % | A | A | A | - | A |
| Vinyl acetate | 100,00 % | A | A | B | A | A |
| Vinyl chloride | 100,00 % | A | A | C | A | - |
| Vinyl cyanide | 100,00 % | A | A | A | A | A |
| Vinylbenzene | 100,00 % | A | C | C | A | A |
| Vinylidene chlorid | 100,00 % | A | C | C | A | - |
| Waterglass | 100,00 % | A | A | A | - | A |
| Xylenes | 100,00 % | A | C | C | A | A |

A Very good resistance, after 30 days exposure, none or only mild damage.

B Conditional resistance; damage can occur after longer exposure periods. (Hair cracks, mechanical stability, discoloration etc.)

C Labile; can lead to destruction, deformation etc. of plastic.

A/C There is a risk of pitting corrosion or stress cracking.

- Currently no information to chemical resistance available.

Resistance to other chemicals available on request.

Due to the wide variety and the different compositions of solvents and substances available on the market, we can assume no guarantee for chemical compatibility. The materials with the best resistance according to the most up-to-date knowledge have been selected for S.C.A.T. products with particular consideration of the requirements for working with aggressive fluids. You may obtain information regarding compatibility with specific substances from the manufacturer of your chemicals or other expert sources. We would be pleased to offer you consultation during selection of suitable products for your application. The responsibility for the selection of the chemicals used lies with the end user. S.C.A.T. Europe offers no guarantee for the results and assumes no obligation or liability concerning the use of these products as regards their chemical compatibility, or abrasive effects.