Chemical Resistance of Milam Laminates – 2018

Resistance	A = resistant	B = conditionally resistant	U = not resistant
Compatibility of media with	Milam H		Milam PSS
Acetaldehyde	B		B
Acetamide	B		B
Acetamide	A		A
Acetic acid	A		A
Acetic acid amylester	A		A
Acetic acid anhydride	A		A
Acetic acid butylester	A		A
Acetone	B		B
Acetylene	B		B
Acrylic acid	A		A
Acrylic acid esters	A		A
Acrylonitril	A		A
Adipic acid	A		A
Air (< 400 °C)	A		A
Aluminum acetate	A		A
Aluminum chlorate	A		A
Aluminum chloride	A		U
Aluminum fluoride	A		U
Aluminum sulfate	A		B
Amino acids	A		B
Ammmonium bifluoride	A		B
Ammonia (anhydrous)	A		A
Ammonia (gaseous)	A		A
Ammonium bifluoride	A		B
Ammonium bisulfate	A		A
Ammonium carbonate	A		A
Ammonium chloride	A		B
Ammonium dihydrogen phosphate	A		A
Ammonium hydroxide	A		A
Ammonium nitrate	A		B
Ammonium persulfate	A		U
Ammonium phosphate	A		A
Ammonium sulfate	A		A
Ammonium thiocyanate	A		A
Amyl acetate	A		A
Aniline	A		A
Aniline hydrochloride	A		U
Aqua regia	U		U
Arsenic acid	A		B
Arsenic trichloride	A		U
Barium chloride	A		A
Beer	A		A

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Resistance	A = resistant	B = conditionally resistant	U = not resistant
Compatibility of media with	Milam H	Milam PSS	
Benzaldehyde	A	A	
Benzene	B	B	
Benzenesulfonic acid	A	U	
Benzoic acid	A	A	
Benzyl chloride	A	A	
Boric acid	A	A	
Bromic acid	B	U	
Bromine (dry)	A	A	
Bromine (wet)	B	U	
Bromine trifluoride	U	U	
Butadiene	B	B	
Butane	A	A	
Butanol	B	B	
Butyl acetate	B	B	
Butyl amine	B	B	
Butyl cellosolve	A	A	
Butyl phenol	A	A	
Butyric acid	A	A	
Calcium carbonate	A	A	
Calcium chloride	A	B	
Calcium hydroxide	A	A	
Calcium hypochlorite	A	U	
Calcium oxide	A	A	
Calcium sulfate	A	A	
Carbolineum	A	A	
Carbon dioxide	A	A	
Carbon disulfide	A	A	
Carbon monoxide	A	A	
Carbon tetrachloride	B	B	
Chloral hydrate	A	A	
Chlorine (dry)	B	B	
Chlorine (wet)	B	U	
Chlorine dioxide	B	B	
Chlorine trifluoride	U	U	
Chloro ethyl benzene	A	A	
Chloroacetic acid	A	U	
Chlorobenzene	A	A	
Chloroform	B	B	
Chloropropionic acid	A	A	
Chromic acid	B	B	
Chromium trioxide (aqueous)	B	B	
Chromosulfuric acid	B	U	
Citric acid	A	A	
Copper acetate	A	A	
Copper chloride	A	A	
Copper sulfate	A	A	

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Compatibility of media with Cresol	Milam H A	Milam PSS A	
Cyclohexane	A	A	
Cyclohexanol	A	A	
Cyclohexanone	B	B	
Decaline	A	A	
Dibenzylether	B	B	
Dibutyl phthalate	A	A	
Dichlorobenzene	A	A	
Dichloromethane	B	B	
Diethanolamine	B	B	
Diethyl ether	B	B	
Diethylamine	B	B	
Dimethyl formamide	B	B	
Dimethyl sulfoxide	B	B	
Dioxane	A	A	
Diphenyl ether	B	B	
Disulfur dichloride	A	A	
Dowtherm (all types)	A	A	
Epichlorohydrin	A	A	
Ethane	A	A	
Ethanol	B	B	
Ethanolamine	A	A	
Ethyl acetate	B	B	
Ethyl amine	B	B	
Ethyl butyl ester	B	B	
Ethyl chloride	B	B	
Ethyl mercaptane	B	B	
Ethylenchlorohydrin	B	B	
Ethylendiamine	B	B	
Ethylendibromide	B	B	
Ethylendichloride	B	B	
Ethylene	B	B	
Ethylene glycol	A	A	
Ethylene oxide	B	B	
Fatty acids	A	A	
Fatty alcohols	B	B	
Fluorine	U	U	
Fluorobenzene	A	A	
Folic acid	A	A	
Formaldehyde	B	B	
Formamide	A	A	
Formic acid	A	B	
Furfural	B	B	

Resistance	A = resistant	B = conditionally resistant	U = not resistant
Compatibility of media with	Milam H	Milam PSS	
Gasoline	A	A	
Glycerine	A	A	
Glycols	A	A	
Heat transfer oil	A	A	
Heating oil	B	B	
Heptane	A	A	
Hexachloro benzene	A	A	
Hydraulic oils	A	A	
Hydrazine	B	B	
Hydrochloric acid	B	U	
Hydrofluoric acid	B	U	
Hydrogen bromide	A	U	
Hydrogen cyanide	A	A	
Hydrogen peroxide	A	B	
Hydrogen sulfide (aqueous)	A	A	
Iodine	A	B	
Iron(II) chloride	B	U	
Iron(II) sulfate	A	A	
Iron(III) chloride	A	U	
Iron(III) sulfate	A	A	
Isooctane	A	A	
Isopropyl acetate	A	A	
Isopropyl alcohol	B	B	
Isopropyl ether	B	B	
Lactic acid	A	B	
Lauryl alcohol	A	A	
Lead acetate	A	A	
Linseed oil	A	A	
Magnesium carbonate	A	A	
Magnesium chloride	A	U	
Magnesium hydroxide	A	A	
Magnesium nitrate	A	A	
Magnesium sulfate	A	A	
Maleic acid	A	A	
Maleic acid anhydride	A	A	
Manganese carbonate	A	A	
Manganese chloride	A	B	
Manganese sulfate	A	A	
Mannitol	A	A	
Mercaptanes	A	A	
Mercuric chloride	A	U	
Mercury	A	A	
Methane	B	B	

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Compatibility of media with	Milam H	Milam PSS	
Methanol	B	B	
Methyl chloride	B	B	
Methyl ethyl ether	B	B	
Methyl ethyl ketone (MEK)	B	B	
Methyl isobutyl ketone (MIBK)	B	B	
Mineral oil	A	A	
Morpholine	A	A	
Motor oil	A	A	
Nickel chloride	A	A	
Nickel sulfate	A	B	
Nitric acid	B	B	
Nitrobenzene	A	A	
Nitrogen	A	A	
Nitrosulphuric acid	U	U	
Nitrous acid	A	B	
Octane	A	A	
Octanol	A	A	
Oleic acid	A	A	
Oxalic acid	A	B	
Oxygen (< 300 °C)	A	A	
Palmitic acid	A	A	
Paraffin oil	A	A	
Paraldehyde	A	A	
Pentane	A	A	
Pentanol	A	A	
Perchloric acid	U	U	
Petroleum	A	A	
Petroleum ether	B	B	
Phenol	A	A	
Phenyl acetic acid	A	A	
Phosgene	A	A	
Phosphoric acid	A	B	
Phosphorous trichloride	A	B	
Phthalic acid	A	A	
Picric Acid	B	U	
Potassium (< 350 °C)	A	A	
Potassium acetate	A	A	
Potassium bromide	A	A	
Potassium carbonate	A	A	
Potassium chlorate	A	B	
Potassium chloride	A	U	
Potassium chromate	A	B	
Potassium cyanide	A	A	
Potassium hydrogensulfate	A	A	

Resistance	A = resistant	B = conditionally resistant	U = not resistant
Compatibility of media with	Milam H	Milam PSS	
Potassium hydroxide	A	A	
Potassium hypochlorite	A	U	
Potassium iodide	A	A	
Potassium nitrate (melt)	A	B	
Potassium permanganate	A	B	
Potassium silicate	A	A	
Potassium sulfate	A	A	
Propane	A	A	
Propene	A	A	
Pyridine	B	B	
Sea water	A	B	
Silicones	A	A	
Siloxanes	A	A	
Silver nitrate	A	A	
Soap	A	A	
Sodium bicarbonate	A	A	
Sodium bisulfate	A	A	
Sodium borate (aqueous)	A	A	
Sodium bromide	A	A	
Sodium carbonate	A	A	
Sodium chloride	A	A	
Sodium hydroxide	A	B	
Sodium hypochlorite	A	U	
Sodium nitrate	A	A	
Sodium peroxide	A	B	
Sodium phosphate	A	A	
Sodium silicate	A	A	
Sodium sulfate	A	A	
Sodium sulfide	A	A	
Soy bean oil	A	A	
Stannic chloride	A	B	
Starch solution	A	A	
Stearic acid	A	A	
Styrene	A	A	
Sulfonic acids	A	A	
Sulfur (molten)	A	A	
Sulfur chloride	A	A	
Sulfur dioxide	A	B	
Sulfur hexafluoride	A	A	
Sulfur trioxide	B	B	
Sulfuric acid < 70 %	B	U	
Sulfuric acid > 70%	U	U	
Sulfuric acid fuming	U	U	
Sulfurous acid	A	A	
Tannin	A	A	

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Compatibility of media with Tartaric acid	Milam H A	Milam PSS A	
Tetrachlorethylene	B	B	
Tetrachloroethane	B	B	
Tetralin	A	A	
Thionylchloride	A	B	
Toluene	A	A	
Tricalcium phosphate	A	A	
Trichloro acetic acid	A	U	
Trichloroethylene	B	B	
Triethanolamine	A	A	
Urea	A	A	
Vapour	A	A	
Vinyl acetate	A	A	
Wine vinegar	A	A	
Xylene	A	A	
Zinc chloride	A	B	
Zinc sulfate	A	A	

The data of the chemical resistance are based on experiments, experience and arguments by analogy. The data should provide a general indication without any warranty claim. We reserve the right to product changes which serve the purpose of technical progress.

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