



MasterEmaco[®] T 5000

Chemical
Resistance Guide





Chemical Resistance Guide

This guide is designed to assist those responsible for material selection. These classifications are determined by field experience and actual laboratory immersion testing over a period of 7 days, per ASTM D-1308.

Resistant (R) Definition

The classification RESISTANT (R) that has been given were samples that did not have an objectionable alteration occur on the surface, such as discoloration, change in gloss, blistering, softening or swelling. While not every one of these chemicals has been individually tested, experience has shown that testing within a generic group will accurately predict „performance“ for the other chemicals that have not been tested in that group.

Conditional (C) Definition

The classification CONDITIONAL (C) has been defined to enable customers with very difficult environmental conditions, but also who, have well controlled standards of housekeeping to take advantage of the cost savings offered by MasterEmaco T 5000 in the confidence that it can still give them a useful life. Generally speaking, if normal SAFETY REGULATIONS for handling strong inorganic acids are observed and a washdown is completed within one hour of spillage, MasterEmaco T 5000 will provide an excellent compromise between cost and performance. Please contact BASF Construction Systems Technical Service at 800-243-6739 for specific information relative to your application.

On this basis, the following table has been compiled as a guide to the suitability of MasterEmaco T 5000 always provided, it is correctly applied, and properly maintained during service. End users should, nevertheless, satisfy themselves that MasterEmaco T 5000 is suitable for their particular environmental conditions, and take into account both the mechanical duty and any elevated temperature, which may accompany spillage. It is advised that these influencing factors should be discussed with your BASF sales representative before finalizing a specification. It should be noted that some environments (especially aggressive oxidizing chemicals) may affect the color of the material on the surface. BASF always recommends a test sample of the selected product under actual job conditions to ensure proper performance.



ACIDS - INORGANIC	CONCENTRATION %	RESISTANCE
Aqua Regia	CONC'D	C
Boric	100%	R
Chlorine Water	SAT'D	R
Chromic	10%	R
Fluosillic	10%	R
Hydrobromic	50%	R
Hydrochloric	35%	R
Hydrofluoboric	4%	R
Hydrofluoboric	6%	R
Hydrofluoric	4%	R
Hydrofluoric	6%	R
Hydrosilicofluoric	4%	R
Hydrosilicofluoric	5%	R
Hypochlorous	SAT'D	R
Muriatic	35%	R
Nitric	20%	R
Nitric	45%	C
Oleum	100%	R
Perchloric	SAT'D	R
Phosphoric	80%	R
Sulfuric	45%	R
Sulfuric	98%	R

ACIDS - ORGANIC	CONCENTRATION %	RESISTANCE
Acetic	60%	C
Acetic	10%	R
Acetic Glacial	100%	C
Acetic Anhydride	100%	C
Adipic	ALL	R
Amidosulfonic	100%	R
Benzoic	100%	R
Chloroacetic	50%	C
Chloroacetic	10%	R
Citric	40%	R
Fatty Acids	100%	R
Formic	50%	R
Fumaric	ALL	R
Gallic	100%	R
Glycolic	100%	C
Heptanic	ALL	R
Lactic Acid	85%	C
Maleic	40%	R
Maleic Anhydride	100%	R
Malic	50%	R
Oleic	ALL	R
Pentargonic	10%	R
Phenyl Sulphuric	10%	R
Picric	50%	R
Prussic	SAT'D	R
Salicylic	SAT'D	R
Stearic	ALL	R
Tartaric	SAT'D	R
Toluenesulfonic	100%	R
Thioglycolic	100%	R
Vinegar	5-10% Acetic Acid	R

ALKALIS	CONCENTRATION %	RESISTANCE
Ammonia, Aqueous	30%	R
Ammonia, Anhydrous	GAS	R
Ammonium Hydroxide	30%	R
Caustic (see Sodium Hydroxide)		
Household Ammonia	5%	R
Milk of Lime	SAT'D	R
Potassium Hydroxide	50%	R
Sodium Hydroxide	25-50%	R

AMINES	CONCENTRATION %	RESISTANCE
Aniline	100%	C
Diethylenetriamine	100%	R
Ethylamine 40% Aq. Soln	40%	R
Methyl Amine	40%	R
Monomethyl Amine	100%	C
Triethanolamine	100%	R

SALTS	CONCENTRATION %	RESISTANCE
Aluminum Chloride	Below 50%	R
Aluminum Sulfate	SAT'D	R
Ammonium Chloride	50%	R
Ammonium Carbonate	50%	R
Ammonium Sulfate	50%	R
Ammonium Nitrate	50%	R
Ammonium Persulfate	50%	R
Ammonium Phosphate	SAT'D	R
Ammonium Sulfide soln	SAT'D	R
Barium Chloride	SAT'D	R
Bleach (see Sodium Hypochlorite)		
Brine (see Sodium Chloride)		
Calcium Bisulfate	SAT'D	R
Calcium Chlorate	SAT'D	R
Calcium Chloride	50%	R
Calcium Disulfide	100%	R
Calcium Hypochlorite	SAT'D	R
Calcium Nitrate	SAT'D	R
Calcium Sulfate	SAT'D	R
Chlorinated Lime	SAT'D	R
Coolant Brines	SAT'D	R
Copper Acetate	SAT'D	R
Copper Chloride	SAT'D	R
Copper Nitrate	SAT'D	R
Copper Sulfate	SAT'D	R
Ferric Chloride	50%	R
Ferric Chloride, Anhydrous	SAT'D	R
Ferric Nitrate	SAT'D	R
Ferric Sulfate	SAT'D	R
Hydrogen Peroxide	50%	R
Hydrogen Sulfide	SAT'D	R
Iron Sulfate	SAT'D	R
Magnesium Bisulfite	SAT'D	R
Magnesium Chloride	SAT'D	R
Magnesium Sulfate	SAT'D	R
Nickel Chloride	SAT'D	R
Nickel Nitrate	SAT'D	R
Nickel Sulfate	SAT'D	R
Potassium Bromide	SAT'D	R
Potassium Carbonate	SAT'D	R
Potassium Chloride	SAT'D	R
Potassium Cyanide	SAT'D	R
Potassium Ferricyanide	SAT'D	R
Potassium Nitrate	SAT'D	R
Potassium Permanganate	Below 5%	R
Potassium Peroxide	SAT'D	R
Potassium Persulfate	SAT'D	R
Potassium Sulfate	SAT'D	R
Potassium Sulfide	SAT'D	R
Salt - saturated solution	SAT'D	R
Sodium Acetate	SAT'D	R
Sodium Bicarbonate	SAT'D	R
Sodium Bichromate	SAT'D	R
Sodium Carbonate	SAT'D	R
Sodium Chlorate	SAT'D	R
Sodium Chloride	SAT'D	R
Sodium Hypochlorite	50 PPM	R
Sodium Hypochlorite	5000 PPM	R

SALTS	CONCENTRATION %	RESISTANCE
Sodium Hypochlorite	Below 6%	R
Sodium Hypochlorite	17%	C
Sodium Nitrate	SAT'D	R
Sodium Peroxide	5%	R
Sodium Phosphate	SAT'D	R
Sodium Sulfate	SAT'D	R
Sodium Sulfide	SAT'D	R
Stannic Chloride	SAT'D	R
Sulfur Chloride	SAT'D	C
Trisodium Phosphate	ALL	R
Urea	100%	R
Zinc Chloride	100%	R

SOLVENTS	CONCENTRATION %	RESISTANCE
Acetone	100%	C
Benzene	100%	R
Benzyl Alcohol	100%	R
Butyl Alcohol	100%	R
Carbon Disulfide	100%	R
Carbon Tetrachloride	100%	R
Chloroform	100%	C
Chloronitrobenzene	100%	R
Cresols	100%	C
Cyclohexane	100%	R
Cyclohexanone	100%	R
Dichlorethylene	100%	C
Diethylene Glycol	100%	R
Dimethylaminoethanol	100%	R
Dimethyl Formamide	100%	C
Dinitrobenzene	100%	R
Ether	100%	R
Ethyl Acetate	100%	R
Ethyl Alcohol	100%	R
Ethylene Dichloride	100%	C
Ethylene Glycol	100%	R
Furfural	100%	R
Furfural Alcohol	100%	R
Glycol	100%	R
Glycol Acetate	100%	R
Methanol	100%	R
Methyl Acetate	100%	R
Methyl Alcohol	100%	R
Methyl Cellosolve	100%	R
Methyl Chloride	100%	C
Methylcyclohexanol	100%	R
Methyl Ethyl Ketone	100%	C
Methylene Chloride	100%	C
Methyl Methacrylate	100%	R
Mono Chlorobenzene	100%	C
Naphthalene	100%	R
Nitrobenzene	100%	C
Perchloroethylene	100%	R
Phenol	5%	R
Phenol	100%	R
Pyridine	100%	C
Styrene	100%	R
Tetrachloroethene	100%	R
Tetrachloromethane	100%	C
Tetrahydrofuran	100%	C
Toluene	100%	R
Trichlorobenzene	100%	R
Xylene	100%	R

MISCELLANEOUS	CONCENTRATION %	RESISTANCE
Acetaldehyde	100%	R
Acetylene	100%	R
Allyl Chloride	100%	R
Amyl Acetate	100%	R
Antifreeze	100%	R
Beer	100%	R
Benzoyl Chloride	100%	R
Benzyl Acetate	100%	R
Benzyl Chloride	100%	R
Bromine	100%	R
Butyl Acetate	100%	R
Carbon Dioxide	100%	R
Caprolactam	20%	R
Castor Oil	100%	R
Chlorine (Dry)	GAS	R
Chlorine (Wet)	5000 PPM	R
Cottage Cheese	100%	R
Cottonseed Oil	100%	R
Crude Oil	-	R
Diphenyl or Diphenyl Oxide	100%	R
Ethyl Chloride	100%	C
Ethylene Dichloride	100%	C
Formaldehyde (Formalin)	37%	R
Glycerine	100%	R
Glycerol	100%	R
Hexachlorocyclopentadiene	100%	C
Hydroquinone	100%	R
Jet Fuel	100%	R
Kerosene	100%	R
Lard	100%	R
Mercury	100%	R
Methylated Spirits	100%	R
Methyl Naphthalene	100%	R
Milk	100%	R
Mineral Oil	100%	R
Miscible Oil	100%	R
Motor Oil	100%	R
Nitric Oxide	100%	R
Nitropropane	100%	R
Oils (Saponifiable)	100%	R
Oxygen	100%	R
P-dimethylaminebenzophenone	100%	R
Paraffin	100%	R
Petroleum	100%	R
Propylene Glycol	100%	R
Phosgene	100%	R
Phthalicanhydride	100%	R
Quinoline Sulfate	100%	R
Sacharin Soins	ALL	R
Steam	100%	R
Sugar Solutions	SAT'D	R
Sulfur Dioxide	100%	R
Sulfuryl Chloride	100%	R
Tannin	100%	R
Tar, Tar Oils	100%	R
Town Gas	100%	R
Turpentine	100%	R
Urine	100%	R
Vegetable Oil	100%	R
Water	100%	R

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