

Technical Data Sheet

Chemical Resistance Guide for TecsPak®

The data tabulated below summarize the effects of a broad variety of fluids on TecsPak polyester elastomers. As a general rule the resistance of TecsPak elastomers to fluids and chemicals increases as the polymer hardness increases. Unless otherwise noted the ratings shown in the table apply to all hardness grades.

Rating Key:
 A – Fluid has little or no effect
 B – Fluid has minor to moderate effect
 C – Fluid has severe effect
 T – No data – likely to have minor effect
 X – no data – likely to have severe effect

Ratings are at 72° (° C) unless otherwise specified. Concentrations of aqueous solutions are saturated. Except where noted.

We emphasize that the data contained herein should be used as a guide only. The tabulation is based primarily on laboratory test but does not take into account all variables that can be encountered in actual use. Therefore it is advisable to test the material under actual service conditions before specification. If this is not practical, tests should be devised that simulate service conditions as closely as possible.

CHEMICAL	RATING	CHEMICAL	RATING
Acetic Acid. 20%	A	Carbon Bisulfide	B (40, 55D)
Acetic Acid. 30%	A	Carbon Bisulfide	A (63, 72D)
Acetic Acid. Glacial	A	Carbon Dioxide	A
Acetic Acid. Clacial (100 °F)[38 °C]	B	Carbon Monoxide	A
Acetic Anhydride	T	Carbon Tetrachloride	C (40D)
Acetone	B	Carbon Tetrachloride	B (55, 63D)
Acetylene	A	Carbon Tetrachloride	A (72D)
Aluminum Chloride Solutions	T	Castor Oil	B (40, 55D)
Aluminum Sulfate Solutions	T	Castor Oil	A (63, 72D)
Ammonium Chloride Solutions	A	Chlorine Gas, Dry	X
Ammonium Hydroxide Solutions	T	Chlorine Gas, Wet	X
Ammonium Sulfate Solutions	B (40, 55, 63D)	Chloroacetic Acid	X
Ammonium Sulfate Solutions	A (72D)	Chlorobenzene	X
Amyl Acetate	B	Chloroform	C (40, 55D)
Amyl Alcohol	A	Chloroform	B (63, 72D)
Aniline	A	Chlorosulfonic Acid	C
ASTM Oil No. 1 (300 °F) [149 °C]	C	Citric Acid Solutions	A
ASTM Oil No. 2 (300 °F) [149 °C]	A	Copper Chloride Solutions	A
ASTM Reference Fuel A (158 °F) [70 °C]	A	Copper Sulfate Solutions	A
ASTM Reference Fuel B (158 °F) [70 °C]	A	Cottonseed Oil	A
ASTM Reference Fuel C	A	Cyclohexane	A
ASTM Reference Fuel C (158 °F) [70 °C]	B (40, 55D)	Dibutyl Phthalate	A
ASTM Reference Fuel C (158 °F) [70 °C]	A (63, 72D)	Diethyl Sebacate	A
Asphalt	T	Diocetyl Phthalate	A
Barium Hydroxide Solutions	T	Epichlorohydrin	X
Beer	A	Ethyl Acetate	B (40, 55, 63D)
Benzene	B (40, 55D)	Ethyl Acetate	A (72D)
Benzene	A (63, 72D)	Ethyl Alcohol	A
Borax Solutions	A	Ethyl Chloride	C (40, 55D)
Boric Acid Solutions	A	Ethyl Chloride	B (63, 72D)
Bromine, Anhydrous Liquid	X	Ethylene Dichloride	C (40, 55D)
Butane	A	Ethylene Dichloride	B (63, 72D)
Butyl Acetate	B (40, 55D)	Ethylene Glycol	A
Butyl Acetate	A (63, 72D)	Ethylene Oxide	A
Calcium Chloride Solutions	A	Ferric Chloride Solutions	T
Calcium Hydroxide Solutions	T	Fluosilicic Acid	T
Calcium Hypochlorite. 5%	A		

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Formaldehyde, 40%	B	Palmitic Acid	A
Formic Acid	B	Perchloroethylene	C (40,55D)
Freon - 11(5)	A	Perchloroethylene	B (63, 72D)
Freon-12	A	Phenol	C
Freon-113 (130°) [55°]	A	Pickling Solution (20% Nitric Acid, 4% HF)	X
Freon 114	A	Pickling Solution (17% Nitric Acid, 4% HF)	X
Gasoline	A	Potassium Dichromate Solutions	T
Glue	A	Potassium Hydroxide Solutions	A
Glycerin	A	PYDRAUL 312(9)	A
n-Hexane	A	Pyridine	X
Hydrazine	C	SAE 10 Oil	A
Hydrochloric Acid, 20%	B	Sea Water	A
Hydrochloric Acid, 37%	C	Silicone Grease	A
Hydrocyanic Acid	T	SKYDROL 5008(10)	A
Hydrofluoric Acid, 48%	X	Soap Solutions	A
Hydrofluoric Acid, 75%	X	Sodium Chloride Solutions	A
Hydrofluoric Acid, Anhydrous	X	Sodium Dichromate, 20%	T
Hydrogen	A	Sodium Hydroxide, 20%	A
Hydrogen Sulfide	A	Sodium Hydroxide, 46 ½%	B
Isooctane	A	Sodium Hypochlorite, 5%	A
Isopropyl Alcohol	A	Soybean Oil	T
JP-4 Jet Fuel	A	Stannous Chloride, 15%	T
Kerosene	T	Steam (212°F) [100 °]	B
Lacquer Solvents	B (40,55D)	Steam (230°) [110 °]	C
Lacquer Solvents	A (63, 72D)	Stearic Acid	T
Lactic Acid	T	Styrene	X
Linseed Oil	T	Sulfur, Molten	T
Lubricating Oils	A	Sulfur Dioxide, Liquid	T
Magnesium Chloride Solutions	T	Sulfur Dioxide, Gas	T
Magnesium Hydroxide Solutions	T	Sulfuric Acid, up to 50%	A
Mercuric Chloride Solutions	T	Sulfuric Acid, above 50%	C
Mercury	A	Sulfuric Acid, Fuming (20% Oleum)	C
Methyl Alcohol	A	Sulfurous Acid	B
Methyl Ethyl Ketone	B (40, 55D)	Tannic Acid, 10%	A
Methyl Ethyl Ketone	A (63, 72D)	Tartaric Acid	T
Methylene Chloride	C	Tetrahydrofuran	B (40, 55D)
Mineral Oil	A	Tetrahydrofuran	A (63, 72D)
Naphtha	A	Toluene	B (40, 55D)
Naphthalene	B (40,55D)	Toluene	A (63, 72D)
Naphthalene	A (63, 72D)	Trichloroethylene	C (40, 55D)
Nitric Acid, 10%	B	Trichloroethylene	B (63, 72D)
Nitric Acid, 30%	C	Triethanolamine	C
Nitric Acid, 60%	C	Trisodium Phosphate Solution	A
Nitric Acid, 70%	C	Tung Oil	T
Nitric Acid, Red Fuming	C	Water (158°F) [70 °]	A
Nitrobenzene	C	Water (212°F) [100 °C]	B
Oleic Acid	A	Xylene	B (40, 55D)
Oleum, 20-25%	C	Xylene	A (63, 72D)
		Zinc Chloride Solutions	A