



CHEMICAL DEGRADATION GUIDE FOR GLOVES

CHEMICAL RESISTANT PROTECTION

This Chemical Degradation Guide is provided as an aid in determining the general suitability of gloves for use with specific chemicals. It indicates only the degrading effect of the chemicals on those materials. It does not consider permeability of the materials or the variable conditions which can influence product performance on actual job applications. Such variable conditions include chemical combinations, concentration, temperature, and the length of time the product is in contact with the chemical. In addition, products of the same material but of different thicknesses may perform differently on the same job. Since the actual use of the gloves may differ, the suitability of the product for a specific job must be determined by testing by the purchaser.

We believe this information is the best currently available. It is subject to revision as additional knowledge and experience are gained. Neither this guide nor any other statement made herein is a warranty that any product is fit for a particular purpose and we shall not be liable to anyone with respect to this information.

KEY TO DEGRADATION GUIDE:

E - Fluid has very little degrading effect. **G** - Fluid has minor degrading effect. **F** - Fluid has moderate degrading effect. **P** - Fluid has pronounced degrading effect. **NR** - Fluid is not recommended with this material.

CHEMICAL	NATURAL RUBBER	NEOPRENE	POLYVINYL CHLORIDE PVC	POLYVINYL ALCOHOL PVA	SOL VEX® NITRILE NBR
1. Acetaldehyde	E	E	NR	NR	P
2. Acetic Acid Glacial	E	E	F	NR	G
3. Acetone	E	G	NR	P	NR
4. Ammonium Fluoride 40%	E	E	E	NR	E
5. Ammonium Hydroxide 29%	E	E	E	NR	E
6. Amyl Acetate	P	NR	P	G	E
7. Amyl Alcohol	E	E	G	G	E
8. Aniline	G	G	F	F	NR
9. Aqua Regia	G	G	G	NR	F
10. Benzaldehyde	F	NR	NR	G	NR
11. Benzene	NR	NR	NR	E	P
12. Butyl Acetate	P	NR	NR	G	F
13. Butyl Alcohol	E	E	G	F	E
14. Butyl Cellosolve®	E	E	P	---	E
15. Carbon Disulfide	NR	NR	NR	E	G
16. Carbon Tetrachloride	NR	NR	F	E	G
17. Castor Oil	E	E	E	E	E
18. Cellosolve® Acetate	G	F	NR	---	F
19. Cellosolve® Solvent	E	E	P	---	G
20. Chlorobenzene	NR	NR	NR	E	NR
21. Chloroform	NR	NR	NR	E	NR
22. Chloronaphthalene	NR	NR	NR	G	P
23. Chlorothene® VG	NR	NR	NR	G	F
24. Chromic Acid 50%	NR	NR	G	NR	F
25. Citric Acid 10%	E	E	E	F	E
26. Cyclohexanol	E	E	E	G	E
27. Dibutyl Phthalate	G	F	NR	E	G
28. Diethylamine	NR	P	NR	NR	F
29. Di-Isobutyl Keton	P	P	P	G	E
30. Dimethyl Formamide, DMF	E	G	NR	NR	NR
31. Dimethyl Sulfoxide, DMSO	E	E	NR	NR	E
32. Dioctyl Phthalate, DOP	F	G	NR	E	G
33. Dioxane	F	NR	NR	P	NR
34. Electroless Copper (MacDermid 9048)	E	E	E	NR	E
35. Electroless Nickel (MacDermid V60/G1)	E	E	E	NR	E
36. Ethyl Acetate	G	F	NR	F	NR
37. Ethyl Alcohol	E	E	G	NR	E
38. Ethylene Dichloride	P	NR	NR	E	NR
39. Ethylene Glycol	E	E	E	F	E
40. Ethyl Ether	NR	E	NR	G	E
41. Formaldehyde	E	E	E	P	E
42. Formic Acid 90%	E	E	E	NR	F
43. Freon TF	NR	E	NR	G	E
44. Furfural	E	G	NR	F	NR
45. Gasoline (white)	NR	NR	P	G	E
46. Glycerine	E	E	E	G	E
47. Hexane	NR	E	NR	G	E
48. Hydrazine 65%	G	E	E	NR	E
49. Hydrochloric Acid 38%	G	E	E	NR	E
50. Hydrochloric Acid 10%	E	E	E	NR	E
51. Hydrofluoric Acid 48%	G	E	G	NR	E
52. Hydrogen Peroxide 30%	E	E	E	NR	E
53. Hydroquinone Saturated	G	E	E	NR	E
54. Isobutyl Alcohol	E	E	F	P	E
55. Iso-Octane	NR	E	P	E	E



CHEMICAL DEGRADATION GUIDE FOR GLOVES

CHEMICAL RESISTANT PROTECTION

KEY TO DEGRADATION GUIDE:

E - Fluid has very little degrading effect. G - Fluid has minor degrading effect. F - Fluid has moderate degrading effect.
P - Fluid has pronounced degrading effect. NR - Fluid is not recommended with this material.

CHEMICAL	NATURAL RUBBER	NEOPRENE	POLYVINYL CHLORIDE PVC	POLYVINYL ALCOHOL PVA	SOL VEX [®] NITRILE NBR
56. Isopropyl Alcohol	E	E	G	NR	E
57. Kerosene	F	E	F	G	E
58. Lactic Acid 85%	E	E	E	F	E
59. Lauric Acid 36%/EtOH	G	E	F	NR	E
60. Linoleic Acid	P	E	G	G	E
61. Linseed Oil	F	E	E	G	E
62. Maleic Acid Saturated	E	E	G	NR	E
63. Methyl Alcohol	E	E	G	NR	E
64. Methylamine	E	G	E	NR	E
65. Methyl Cellosolve [®]	E	E	P	G	F
66. Methylene Bromide	NR	NR	NR	G	NR
67. Methylene Chloride	NR	NR	NR	G	NR
68. Methyl Ethyl Ketone, MEK	G	P	NR	F	NR
69. Methyl Isobutyl Keton, MIBK	F	NR	NR	F	P
70. Methyl Methacrylate	P	NR	NR	G	P
71. Mineral Spirits, Rule 66	NR	G	F	E	E
72. Monoethanolamine	E	E	E	F	E
73. Morpholine	E	P	NR	G	NR
74. Naphtha VM&P	NR	G	F	E	E
75. Nitric Acid 10%	G	E	G	NR	E
76. Nitric Acid 70%	NR	G	F	NR	NR
77. Nitric Acid Red Fuming	P	NR	P	NR	NR
78. Nitric Acid White Fuming	NR	NR	P	NR	NR
79. Nitrobenzene	F	NR	NR	G	NR
80. Nitromethane 95.5%	E	E	P	G	F
81. 1-Nitropropane 95.5%	E	G	NR	E	NR
82. Octyl Alcohol	E	E	F	G	E
83. Oleic Acid	F	E	F	G	E
84. Oxalic Acid Saturated	E	E	E	P	E
85. Palmitic Acid Saturated	G	E	G	P	G
86. Pentachlorophenol 1.25% H ₂ O	NR	E	F	NR	E
87. Pentane	P	E	NR	G	E
88. Perchloric Acid 60%	F	E	E	NR	E
89. Perchloroethylene	NR	NR	NR	E	G
90. Phenol 90%	E	E	G	F	NR
91. Phosphoric Acid, Conc	G	E	G	NR	E
92. Picric Acid Saturated/EtOH	G	E	E	NR	E
93. Potassium Hydroxide 50%	E	E	E	NR	E
94. Propyl Acetate	F	P	NR	G	F
95. Propyl Alcohol	E	E	F	P	E
96. Propylene Oxide	P	NR	NR	G	NR
97. Rubber Solvent	NR	G	NR	E	E
98. Silicon Etch	NR	G	F	NR	NR
99. Sodium Hydroxide 50%	E	E	G	NR	E
100. Stoddard Solvent	NR	E	F	E	E
101. Styrene	NR	NR	NR	G	NR
102. Sulfuric Acid 95%	NR	F	G	NR	NR
103. Tannic Acid 65%	E	E	E	P	E
104. Tetrahydrofuran, THF	NR	NR	NR	P	NR
105. Toluene, Toluol	NR	NR	NR	G	F
106. Toluene Di-isocyanate, TDI	F	NR	P	G	NR
107. Trichlorethylene, TCE	NR	NR	NR	E	NR
108. Tricresyl Phosphate, TCP	E	F	F	G	E
109. Triethanolamine 85%, TEA	G	E	E	G	E
110. Tung Oil	NR	E	F	E	E
111. Turpentine	NR	NR	P	G	E
112. Xylene, Xylol	NR	NR	NR	E	G

Cellosolve[®] is a registered trademark of the Union Carbide Corp.
Chlorothene[®] is a registered trademark of the Dow Chemical Corp.
Freon[®] is a registered trademark of E.I. DuPont de Nemours.