

## TABLE 4. SELECTION OF FOOTWEAR MATERIALS FOR CHEMICAL RESISTANCE

### Types of Upper Materials

R=Recommended      NR=Not Recommended

Contaminant	Leather	Coated Leather	Textiles & Coated Fabrics	Natural Rubber	PVC	PVC Urethane Blend	Polyurethane
Concentrated mineral acids	NR	R**	NR	R	R	NR	NR
Dilute mineral acids	R	R	NR	R	R	R	R*
Alkalis	NR	R	NR	R	R	R	R*
Fats/organic acids	R*	R	NR	NR	NR	R	R
Polar organic solvents#	R	NR	NR	R	NR	NR	NR
Non-polar organic solvents##	R	R**	NR	NR	R	R	R
Oils/lubricants	R	R**	NR	R	NR	R	R

\*=Some resistance, but only short term

\*\*=Leather with nitrile rubber coating only

### Types of Soling Materials

R=Recommended      NR=Not Recommended

Contaminant	PVC	PVC Urethane Blend	Nitrile Rubber	Polyurethane Polyester	Polyurethane Polyether	Natural Rubber	Leather
Concentrated mineral acids	R	NR	R	R	MR	R	NR
Dilute mineral acids	R	R	R	R	R*	R	R*
Alkalis	R	R	R	R	R*	R	R*
Fats/organic acids	NR	R	R	R	R	NR	R
Polar organic solvents#	NR	NR	NR	R	NR	R	R
Non-polar organic solvents##	R	R	R	R	R	NR	R
Oils/lubricants	NR	R	R	R	R	NR	R

\*=Some resistance, but only short term

# Polar organic solvents include those that dissolve in water including, ethanol, methanol, and acetone.

## Non-polar organic solvent do not dissolve in water and include hexane and benzene.