Chemical Resistance Comparison

E – Excellent G – Good F – Fair P – Poor

This **Chemical Resistance Comparison** chart is based on theoretical information available in literature about the chemical resistance of individual elastomers. It is provided as a general guide for qualified professionals who recommend, select, specify or otherwise determine the suitability of products for worker safety. As such, the Chemical Resistance Comparison chart is advisory only and addresses the relative resistance of rubber, neoprene and PVC to degradation by the listed chemicals.

This chart does not address resistance to permeation. Permeation resistance of a particular elastomer cannot be inferred based on the chemical resistance information provided in this chart. The suitability of a product for a specific application must be determined and tested by the purchaser. **Norcross Safety Products L.L.C. assumes no responsibility for the suitability of an end user's product selection for a specific application.**

	Rubber	Neoprene	PVC	TPU
Acetaldehyde	F	F	P	E
Acetic Acid	E	F	P	G
Acetone	F	P	P	G
Acrylonitrile	F	P	G	G
Ammonia Anhydrous	E	E	P	G
Ammonium Hydroxide	G	E	G	G
Ammonium Sulphate	E	E	G	P
Amyl Acetate	F	P	P	E
Amyl Alcohol (Fusel Oil)	E	E	E	G
Animal Fats	P	G	G	E
Aniline	F	P	P	P
Battery Acid	P	F	G	E
Benzaldehyde	F	P	P	E
Benzene (Benzol)	P	P	P	G
Benzol (Benzene)	P	P	P	G
Benzyl Alcohol	P	G	E	F
Benzyl Chloride	P	P	P	P
Butane	F	G	F	E
Butter	P	G	E	E
Buttermilk	P	E	G	E
Butyraldehyde	P	F	P	G
Butyl Acetate	P	P	P	F
Butyl Alcohol	E	E	G	E
Calcium Chloride	E	E	E	G
Calcium Hypochlorite	P	F	E	F
Carbolic Acid	P	P	F	P
Carbon Disulfide	P	P	P	P
Carbon Tetrachloride	P	G	P	P
Carbonic Acid	E	E	E	E
Castor Oil	E	E	E	G
Caustic Potash	G	E	G	G
Caustic Soda	E	E	E	G
Chlorine Water	F	F	F	G
Chloroacetone	F	F	P	G
Chloroform	P	P	P	P
Chlorothene	P	P	P	F
Chlorox	P	G	G	G
Citric Acid	E	E	E	G
Coal Tar Solvents	P	P	G	G
Coconut Oil	P	E	F	E
Copper Chloride	G	G	E	G
Copper Sulphate	G	E	E	G
Cottonseed Oil	P	E	G	E
Cutting Oil	P	G	P	G
Cyclohexane	P	P	P	G
Cyclohexanone	P	P	P	G
Diacetone Alcohol	G	G	P	G
Dibenzyl Ether	P	P	P	F
Dibutyl Phthalate	P	P	P	F
Dioctylphthalate	P	G	P	G
Diesel Fuel	P	G	F	E
Diethanolamine	G	G	G	E
Diisobutylene	P	P	P	F
Ethyl Acetate	P	P	P	F
Ethyl Alcohol	E	E	G	E
Ethylene Glycol	E	E	E	E
Ethyl Ether	P	P	P	E
Ethyl Formate	P	P	P	E
Ferric Chloride	E	E	E	P
Formaldehyde	G	G	G	G
Formic Acid	G	E	G	G
Furfural	P	G	F	G
Fusel Oil (Amyl Alcohol)	E	E	E	G
Gasoline (Cracked)	P	F	F	E
Gasoline (SR)	P	G	F	E
Glycerine	E	E	E	E
Grease (Petroleum Based)	P	F	E	E
Hexane	P	G	F	G
Hydraulic Fluids (Petroleum Base)	P	G	E	E
Hydraulic Fluids (Phosphate Ester)	P	P	P	P
Hydraulic Fluids (Silicate Ester)	P	E	P	F
Hydraulic Fluids (Water Glycol)	G	F	P	G
Hydrobromic Acid	E	F	E	G
Hydrochloric Acid	E	G	E	G
Hydrofluoric Acid	P	F	E	G
Hydrofluoric Acid (Hot)	P	P	G	F
Hydrogen Peroxide	F	P	G	G
Hydrogen Sulfide	F	E	E	F
Hylene (Toluene Diisocyanate)	P	P	P	E
Isopropyl Alcohol	E	E	E	E
Kerosene (Coal Tar)	P	F	G	G
Kerosene (Pet.)	P	P	P	F
Lactic Acid	G	E	G	E
Lard Oil	P	G	G	E
Linseed Oil	P	E	P	E
Malic Acid	E	E	E	G
Methyl Acetate	P	F	P	G
Methyl Alcohol	E	E	G	E
Methyl Cellosolve	P	G	E	G
Methyl Chloride	P	P	P	G
Methyl Ethyl Ketone	P	P	P	G
Milk	E	P	E	E
Mineral Oil	P	E	E	E
Monoethanolamine	G	G	G	P
Morpholine	P	P	F	G
Naphtha	P	P	F	G
Nitric Acid	F	P	P	G
Nitrobenzene	P	P	P	P
Octyl Alcohol	G	G	P	G
Oleic Acid	P	F	G	G
Olive Oil	P	G	F	E
Paint Remover	P	P	P	G
Perchlorethylene	P	P	P	G
Perchloric Acid	P	G	P	P
Petroleum Oils	P	G	G	E
Petroleum Solvent	P	G	G	E
Phosphoric Acid 20%	F	F	F	G
Pine Oil	P	P	F	G
Potassium Dichromate	G	E	G	E
Potassium Hydroxide	G	E	G	G
Potassium Permanganate	E	E	G	G
Propane	P	G	E	G
Propyl Acetate	P	P	P	F
Propyl Alcohol	E	E	E	E
Silicone Oil 220	G	E	G	E
Skydrol #500	P	P	P	F
Soaps	G	G	G	E
Sodium Chloride	E	E	G	G
Sodium Hydroxide	E	E	E	G
Stearic Acid	F	G	E	E
Sulfuric Acid	F	F	G	E
Tannic Acid	E	E	E	G
Tide	P	G	G	G
Tin Chloride	G	G	G	P
Toluene	P	P	P	G
Toluol	P	P	P	G
Trichlorethylene	P	P	P	P
Tricresyl Phosphate	F	F	P	P
Triethanolamine	G	G	G	F
Trinitrotoluene (TNT)	P	G	G	F
Tung Oil	P	E	F	E
Turpentine	P	G	G	G
Water	E	E	E	E
Water 100C	E	E	E	E
Xylol	P	P	P	F

With NSP Triple Density Technology®, it is possible to mold three compounds in one boot. Normally, two compounds are used to make the parts of the outsole both durable and slip resistant in specific organic or inorganic substances. The third compound is used to mold job-specific boot uppers for use in harsh environments such as slaughterhouses, agri-industrial fertilizers and chemicals, petrochemicals, dairy and poultry processing, commercial fishing and processing, breweries, and other specific applications. Note the recommended job applications for Triple Density Footwear throughout this catalog. In these applications, the footwear ratings will be even better than the ratings for ordinary PVC as shown in this Chemical Resistance Chart.