DUNLOP BOOT CHEMICAL RESISTANCE GUIDE

1 PVC
2 PVC/Nitrile
3 Polyurethane Boots

+++ excellent
++ good
+ fair
- not recommended

	1	2	3
INORGANIC ACIDS			
sulfuric acid (<10%)	+++	+++	+
sulfuric acid (con.)	-	-	-
hydrochloric acid (<10%)	+++	+++	+
hydrochloric acid (con.)	++	++	-
nitric acid (<5%)	++	++	+
nitric acid (5-25%)	+	+	-
nitric acid (25-50%)	-	-	-
phosphoric acid (<50%)	++	++	-
hydrofluoric acid (<30%)	++	++	-
chromium trioxide (sol.)	+	+	-
ORGANIC ACIDS			
acetic acid (<10%)	+++	+++	+
butyric acid (<20%)	++	++	++
butyric acid (con.)	++	++	++
citric acid (sol.)	+++	+++	+
lactic acid (<10%)	++	++	+
formic acid (<10%)	++	++	-
oxalic acid	++	++	-
BASES			
ammonium hydroxide (<5%)	+++	+++	+
ammonium hydroxide (con.)	++	++	-
barium hydroxide (sol.)	++	++	-
calcium hydroxide (sol.)	++	++	-
magnesium hydroxide (sol.)	++	++	-
sodium hydroxide (<50%)	++	++	-

	1	2	3
SALT IN SOLUTION			
aluminum acetate	+++	+++	++
aluminum chloride	+++	+++	+
ammonium hydrogene carb.	+++	++++	
ammonium chloride	+++	+++	+
ammonium sulfide	+++	+++	++
antimony trichloride	++	++	+
barium chloride	+++	+++	++
potassium carbonate	+++	++	-
potassium chlorate	++	++	+
potassium nitrate	+++	+++	+
potassium permanganate	++	++	+
lead acetate	+++	+++	++
lead nitrate	+++	+++	+
magnesium carbonate	+++	+++	+
magnesium chloride	+++	+++	++
mercurichloride	-	-	+
sodium acetate	+++	++	-
sodium chlorate	++	++	+
sodium chloride	+++	+++	+++
sodium fluoride	+++	+++	+++
sodium hypochlorite	++	++	-
nickel sulfate	+++	+++	+
stannic chloride	++	++	+
silver nitrate	+++	+++	+
zinc chloride	+++	+++	+
zinc sulfide	+++	+++	++
ESTERS			
amylacetate	-	-	+
dibutylphthalate	-	-	++
dioctyphthalate	-	-	++
ethyl acetate	-	-	+
ethyl formate	-	-	+
methyl formate	-	-	+
ETHERS			
dibenzyl ether	-	-	+
AMINES			
triethanol amine	++	++	+

	1	2	3
MINERAL OILS & FATS			
engine oil	-	++	+++
cutting oil	-	++	+++
mineral oil	-	++	+++
boarding oil	-	++	+++
VEGETABLE/ANIMAL OILS & FATS			
margarine	-	+++	+++
mayonnaise	-	+++	+++
lactic	-	+++	+++
butter	-	+++	+++
pine oil	-	+++	+++
bean oil	-	+++	+++
coconut oil	-	+++	+++
fish oil	-	+++	+++
beef suet	-	+++	+++
higher alcohols	-	++	+++
higher fatty acids	-	+++	+++
HYDROCARBONS			
xylene	-	++	++
gasoline	-	++	+++
cyclothexane	-	++	++
kerosene	-	++	+++
naptha	-	++	++
petroleum	-	++	++
refined petrol	-	++	+++
ALCOHOLS			
butyl alcohol	-	+	+++
hexyl alcohol	+	++	+++
isopropyl alcohol	+	++	+++
methyl alcohol	+	++	+++
octyl alcohol	-	++	+++
diethylene glycol	++	++	+++
glycerine	++	++	+++
CHLORINATED HYDROCARBONS			
methylene chloride	-	+	+
trichloro ethylene	-	++	+
tetrachloro ethylene	-	++	+
ALDEHYDES			
acetaldehyde	-	-	-
benzaldehyde	-	-	-
formaldehyde	-	++	-
KETONES			
acetone	-	-	+
cylohexanone	-	-	-
methylethylketone	-	-	+
MISCELLANEOUS			
detergents	+	++	++
sugar solution	+++	+++	+++
paint remover	-	+	-