

Chemical Resistance
van de Lande B.V.
25.07.2002

+ Good resistance
~ Limited resistance
- Not resistant

Substance	Conc.	PVC-U		PP		PE		EPDM		NBR		FPM	
		20°C	60°C	20°C	60°C	20°C	60°C	20°C	60°C	20°C	60°C	20°C	60°C
Acetaldehyde	40% 100%	~		+	+	+	~	+	+	-		+	~
Acetic acid	<20% 20-30% 30-60% >60%	+	+	+	+	+	+	+	~	+		+	~
Acetic anhydride		-	-	+		+	~	~				-	-
Acetone		-	-	+	+	+	+	+	+	-	-	-	-
Acrylic ester		-		-				~		-		-	
Acrylonitrile		-		+		+	+	+	~	-		~	-
Adipic acid		+	-	+	+	+	+	+	+	+	+	+	+
Alcoholic spirits	40%	+		+		+		+		+		+	
Allyl alcohol	96%	~	-	+	+	+	+	~	~	+	+	~	-
Aluminium chloride		+	+	+	+	+	+	+	+	+	+	+	+
Aluminium potassium sulphate		+	~	+	+	+	+	+	+	+	~	+	+
Aluminium sulphate		+	+	+	+	+	+	+	+	+	+	+	+
Ammonia, dry gas		+	+	+		+	+	+	~			+	
Ammonia, liquid		~	-	+		+		+				-	
Ammonium acetate		+	~	+	+	+	+	+	+	+		+	+
Ammonium carbonate	50%	+	~	+	+	+	+	+	+	+	+	+	+
Ammonium chloride		+	~	+	+	+	+	+	+	+	+	+	+
Ammonium fluoride	20%	+	~	+	+	+	+					+	+
Ammonium hydroxide		+	~	+	+	+	+	+	+	+	~	-	
Ammonium nitrate		+	+	+	+	+	+	+	+	+	~	+	+
Ammonium phosphate		+	+	+	+	+	+	+	+	+	~	+	+
Ammonium sulphate		+	+	+	+	+	+	+	+	+	~	+	+
Ammonium sulphide		+	~	+	+	+	+	+	+	+	+	+	-
Amyl acetate		-	-	~	-	+	+	~		-		-	
Amyl alcohol		+	~	+	+	+	~	+	+	+	+	~	
Aniline		-		~		+	+	-		-		~	~
Aniline hydrochloride		+		+	~	+	+	+	+	~		~	
Antimony trichloride	90%	+		+	+	+	+	+		-		+	
Aqua regia		+		-		-		-		-		~	
Arsenic acid	80%	+	~	+	+	+	+	+	+	+	+	+	+
Barium hydroxide		+	~	+	+	+	+	+	+	+	+	+	+
Barium salts		+	+	+	+	+	+	+	+	+	+	+	+
Beer		+	+	+	+	+	+	+		+		+	
Benzaldehyde		-		+		+	+	+	+	~		+	+
Benzene		-	-	~	-	~	-	-	-	~		+	
Benzine		+	+	~	-	+	~	-	-	+	+	+	+
Benzoic acid		~	-	+	+	+	+	-	-	-	-	+	+
Benzyl alcohol		~		+	~	+	+	-		-		+	
Borax		+	~	+	+	+	+	+	+	+	+	+	+
Boric acid		+	~	+	+	+	+	+	+	+	+	+	+
Bromine gas		-		-		-		-		-		+	
Bromine liquid		-		-		-		-		-		+	
Bromine water		+		-		-		-		-		+	
Butadiene		+		+	+	~	-	-		-		~	

Butane		+	+	+		+		-		+		+	
Butanediol	10%	+		+	+	+		+	+	+	+	+	+
Butanol		+	~	+	~	+		+	+	+	+	+	-
Butyl acetate		-		~		+	~	+	-	-		~	-
Butyl phenol		~	-	+		+	+	-		-		~	-
Butylene glycol		+	~	+	+	+		+	+	-		+	~
Butylene liquid		+		-		-		~		+		+	
Butyric acid	20%	+	-			+	+	+		-		+	
	98%	-	-		+	~	~	~		-		~	
Calciumbisulphite		+						+		-		+	+
Calcium chloride		+	~	+	+	+	+	+	+	+	+	+	+
Calcium hydroxide		+	+	+	+	+	+	+	+	+	~	+	+
Calcium hypochlorite		+		+	+	+	+	+	+	+		+	-
Calcium nitrate		+	+	+	+	+	+	+	+	+		+	+
Carbon dioxide, moist		+	~	+	+	+	+	+	+	+	+	+	+
Carbon dioxide, anhydrous		+	+	+	+	+	+	+	+	+	+	+	+
Carbon disulphide		-		~		~	-	-		-		+	
Carbon tetrachloride		-	-	-	-	~	-	-	-	-	-	+	+
Chloral hydrate		-		~	-	+	+	~		-		~	
Chlorethanol		-		+	+	+	+	~		+		-	
Chloric acid	10%	+	~	-		+	+	+	+	-		-	
	20%	+	~	-		~		+		-		-	
Chlorine, aqueous		~	-	-	-	+	~	-	-	-	-	-	-
Chlorine, dry gas		~	-	-	-	~	-	-	-	-	-	+	-
Chlorine water		~		~		-		~		-		~	
Chloroacetic acid		+	~	+	+	+	+	~		-		+	
Chlorobenzene		-		+		~	-	-		-		-	
Chloroform		-		~		~	-	-		-		~	
Chlorosulphonic acid	100%	~	-	-	-	-	-	-	-	-	-	-	-
Chrome alum		+	+	+	+	+	+	+	+	+	+	+	+
Chromic acid	<50%	+	~	~	-	~	-	~	~	-		+	+
Cider		+		+		+	+	+		+		+	
Citric acid	20%	+	~	+	+	+	+	+	+	+	~	+	+
Coal gas, benzene free		+		+		+		-		+		+	
Compressed air, containing oil		~		~		+		-		+		+	
Copper chloride		+	+	+	+	+	+	+	+	+	+	+	+
Copper fluoride	2%	+	+	+	+	+	+	+	+	+	~	+	+
Copper salts		+	~	+	-	+	+	+	+	+	~	+	+
Copper sulphate		+	+	+	+	+	+	+	+	+	~	+	+
Cresols		~	-	+	-	+	~	-	-	~		~	
Crotonic aldehyde		~		+		+		+		+		+	
Cyclohexane		-		+		+	+	-		+		+	
Cyclohexanol		+	+	+	~	+	+	-		~		+	
Cyclohexanone		-	-	+	~	+	~	~		-	-	-	-
Densodrine		+	+							+		+	
Detergents		+	~	+	+	+	+	+	+	+	+	+	+
Dextrine		+	+	+		+	+	+	+	+	+	+	+
Dichloroacetic acid		+	~	+	~	+	~	+	+	-		~	
Dichloroethane		-	-	~		~	~	~	-	-		-	
Dichloromethane		-	-	~	-	~	~	-		-		~	
Diesel oil		+		~		+	~	-		+		+	
Diethylamine	30%	~		+				~		-		~	
Diglycolic acid	30%	+	~	+	+	+	+	+	~			+	+
Dimethylamine		~		+		+	~	~		-		-	

Dioxane		-	~	~	+	+	+	~	-
Ethanol	96%	+	~	+	+	+	+	+	+
Ethyl acetate		-	-	+	~	~	~	-	-
Ethyl alcohol	96%	+	~	+	+	+	+	+	~
Ethyl chloride		-		~		-		~	
Ethyl ether		-		+	~	-		-	
Ethylene chloride		-		~		-	~		+
Ethylene diamine		~		+	+	+	+	~	-
Ethylene glycol		+	+	+	+	+	+	~	+
Fertilizer salts		+	~	+	+	+	+	+	+
Fluorosilicic acid		+	+	+		~	-	-	-
Formaldehyde	40%	+		+	+	+	+	~	+
Formamide		-		+	+	+		+	~
Formic acid	<50%	+	~	+	~	+	~	-	-
Fruit juices		+	+	+	+	+	+	+	+
Fuel oil		+		~		-		+	+
Furfuryl alcohol		-	-	+	~	+	+	~	-
Gelatine		+		+	+	+	+	+	+
Glucose		+	~	+	+	+	+	+	+
Glycerine		+	+	+	+	+	+	+	~
Glycocoll	10%	+		+		+		+	
Glycolic acid	37%	+		+	+	+	+	+	
Heptane		+		+	~	+	~	-	
Hexane		+		+	~	+	~	-	
Hydrazine hydrate		+		+	+	+	+	-	
Hydrobromic acid	10%	+	+			+	+		+
	50%	+	~	+	+	+	~	~	-
Hydrochloric acid	<25%	+	+	+	+	+	+	-	-
	25-40%	+	~	+	~	+	~	-	-
Hydrocyanic acid		+	~	+	+	+	+	~	
Hydrofluoric acid	40%	~	-	+	~	-	-	-	-
	60%	~	-	+	+	-	-	-	-
	70%	~	-	+		-	-	-	-
Hydrogen		+	+	+	+	+	+	+	+
Hydrogen chloride		+	~	+	+	+	+	~	
Hydrogen peroxide	10%	+	~	+	+	~	-	+	-
	30%	+		+	~	~	-	-	~
	90%	+		-		~	~	-	~
Hydrogen sulphide		+	+	+	+	+	~	+	-
Hydroxylamine sulphate		+		+	+	+	+	+	
Iron trichloride		+	~	+	+	+	+	+	+
Kerosene		+	+	+		+	~	~	-
Lactic acid	<10%	+	~	+	+	+	+	~	~
	>10%	~	-	+	+	+	+	~	-
Lead acetate		+	+	+	+	+	+	+	+
Lead tetraethyl		+		+		+	~	+	
Magnesium chloride		+	~	+	+	+	+	+	+
Maleic acid		+	~	+	+	+	+	~	-

Methyl alcohol		+	~	+	+	+	+	+	+	+	+	~	~
Milk		+	+	+	+	+	+	+	+	+	+	+	~
Mineral oil		+	+			+	~	-	-	+	+	+	+
Molasses		+	~	+	+	+	+	+	+	+	+	+	+
Nickel sulphate		+	+	+	+	+	+	+	+	+	+	+	+
Nitric acid	<50%	+	~	~	-	~	-	-	-			+	~
	>50%	-	-	-	-	-	-	-	-			-	-
Oils and Fats		+	+	+	+	+	~	-	-	+		+	+
Oleic acid		+	+	+	~	+	~	-		~	-	+	-
Oleum, 10% SO3		-	-	-	-	-	-	-	-	-	-	-	~
Oxalic acid		+	+	+	+	+	+	+	+	~	-	+	+
Oxygen		+	+	+	~	+	+	+	+	-		+	+
Ozone		+		~	-	~	-	+	-	-		+	-
Perchloric acid	10%	+	~	+	+	+	+	~	+	-	-	+	+
	70%	-	-	~	-	+	-	+	~	-	-	+	~
Phenol	10%	+		+	+	+	~	+	+	-		+	+
	90%	~		+	+	+	~	-		-		+	-
Phenylhydrazine		-	-	~		~	-	~		-	-	+	~
Phenylhydrazine hydrochloride		~		+	~	+	-	+	~	~		+	~
Phosphine		+	+	+	+	+	+						
Phosphoric acid	<50%	+	+	+	+	+	+	+	+	~	-	+	+
	50-85%	+	+	+	+	+	~	+	+	-	-	+	+
Picric acid	1%	+		+		+		+	~	~		+	+
Potassium bichromate		+	~	+	+	+	+	+	+	+		+	+
Potassium borate	10%	+	~	+	+	+	+	+	+	+	+	+	+
Potassium bromate		+	~	+	+	+	+	+	+	+	+	+	+
Potassium bromide		+	+	+	+	+	+	+	+	+	+	+	+
Potassium chlorate		+	+	+	+	+	+	+	+	+		+	+
Potassium chloride		+	+	+	+	+	+	+	+	+	+	+	+
Potassium chromate		+	+	+	+	+	+	+	+	+	-	+	+
Potassium cyanide		+	+	+	+	+	+	+	+	+	+	+	-
Potassium dichromate		+	+	+	+	+	+	+	+	~		+	+
Potassium iodide		+	+	+	+	+	+	+	+	+	-	+	+
Potassium nitrate		+	+	+	+	+	+	+	+	+	+	+	+
Potassium perchlorate		+	~	+	+	+	~	+	+	+		+	+
Potassium permanganate		+	~	+	+	+	~	+	+	+		+	+
Potassium persulphate		+	~	+	+	+	+	+	+	-		+	+
Potassium phosphates		+	~	+	+	+	+	+	+	+	-	+	+
Potassium sulphate		+	~	+	+	+	+	+	+	+	+	+	+
Pyridine		-	-	~		+	~	+	~	-		~	
Sea water		+	~	+	+	+	+	+	+	+	+	+	+
Silver nitrate		+	~	+	+	+	+	+	+	+	+	+	+
Soap		+	~	+	+	+	+	+	+	+	+	+	+
Sodium acetate		+		+	+	+	+	+	+	+		+	+
Sodium benzoate		+	~	+	+	+	+	+	+	+		+	+
Sodium bicarbonate		+	+	+	+	+	+	+	+	+	+	+	+
Sodium bisulphate	10%	+	~	+	+	+	+	+	+	+	-	+	+
Sodium bisulphite		+	-	+	+	+	+	+	+	~	-	~	-
Sodium bromate		+		+		+		+	+	+	-	+	+
Sodium bromide		+	~	+	+	+	+	+	+	+		+	+
Sodium carbonate		+	+	+	+	+	+	+	+	+	+	+	+
Sodium chlorate		+	~	+	+	+	+	+	+	+	-	+	+

Sodium chloride		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Sodium chlorite		~	+ ~	+ +	+ +	+ +	-	+ +
Sodium chromate		+ ~	+ +	+ +	+ +	+ +	+ -	+ +
Sodium disulphite		+ ~	+ +	+ +	+ +	+ +	~	+ +
Sodium dithionite	10%	+ ~	+ +	+ +	+ +	+ +	+ -	+ +
Sodium fluoride		+ +	+ +	+ +	+ +	+ +	+ ~	+ +
Sodium hydroxide	10%	+ ~	+ +	+ +	+ +	+ +	+ +	~ ~
	50%	+ +	+ +	+ +	+ +	+ ~	~ -	- -
Sodium hypochlorite		+ ~	~ -	~ -	+ +	+ +	-	+ +
Sodium iodide		+ ~	+ +	+ +	+ +	+ +	+ ~	+ +
Sodium nitrate		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Sodium nitrite		+ +	+ +	+ +	+ +	+ +	+ -	+ +
Sodium oxalate		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Sodium persulphate		+ ~	+ +	+ +	+ +	+ +	-	+ +
Sodium phosphate		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Sodium silicate		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Sodium sulphate		+ ~	+ +	+ +	+ +	+ ~	+ +	+ +
Sodium sulphide		+ ~	+ +	+ +	+ +	+ +	+ +	-
Sodium sulphite		+ ~	+ +	+ +	+ +	+ +	+ -	+ +
Sodium thiosulphate		+ ~	+ +	+ +	+ +	+ +	+ -	+ +
Stannous chloride		+ +	+ +	+ +	+ +	+ -	+ ~	+ +
Sugar		+ +	+ +	+ +	+ +	+ +	+ +	+ +
Sulfuric acid	<40%	+ ~	+ +	+ +	+ +	+ +	~	+ +
	40-90%	+ -	+ +	+ ~	+ -	+ -	- -	+ +
	96%	~ -	- -	~ -	- -	- -	- -	+ -
Sulfurous acid		+ ~	+ +	+ +	+ +	+ -	- -	+ ~
Sulphur dioxide, moist		~ -	+ +	+ +	+ +	+ +	-	+ +
Sulphur dioxide, anhydrous		+ +	+ +	+ +	+ +	+ +	-	+ +
Tannic acid		+ +	+ +	+ +	+ +	+ +	+ +	+ +
Tartaric acid		+ +	+ +	+ +	+ +	+ -	+ ~	+ +
Toluene		- -	~ -	~ -	- -	- -	- -	~ -
Trichloroethylene		- -	- -	- -	- -	- -	- -	+ -
Urea	10%	+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Urine		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Vinegar		+ +	+ +	+ +	+ +	+ +	- -	~ -
Vinyl acetate		- -	+ ~	+ +	+ +	+ -	+ +	+ +
Wine		+ +	+ +	+ +	+ +	+ +	+ +	+ +
Xylenes		- -	- -	~ -	- -	- -	- -	+ -
Yeast		+ ~	+ +	+ +	+ +	+ +	+ +	+ +
Zinc chloride		+ +	+ +	+ +	+ +	+ +	+ +	+ +