

Chemical resistance CPX Containers and Tanks
Based on ISO/TR 7474: 1981

CPX Containers and Tanks are manufactured from PE-polyethylene with exceptional chemical resistance and durability.

Declaration is valid at temperatures 20 and 60°C in normal atmospheric pressure without external load or stress.

Contact Cipax for technical advice about chemicals missing in list or for formulations of different chemicals.

DEFINITIONS

S = Satisfactory

L=Limited

U=Unsatisfactory

X=Not specified

Sat. Sol.	saturated aqueous Solution, prepared at 20°C
Sol.	aqueous Solution at a concentration, higher than 10%, but not saturated
Dil. Sol.	Dilute aqueous solution at a concentration, equal to, or lower than, 10%
Work Sol.	aqueous Solution having the usual concentration for industrial use

CHEMICAL/PRODUCT	CONCENTRATION	TEMPERATURE	
		20°C	60°C
Kolumn1	Kolumn3	Kolumn9	Kolumn10
acetaldehyde	100%	L	U
acetic acid	10%	S	S
acetic acid	60%	S	L
acetic acid, glacial	> 96 %	L	U
acetic anhydride	100%	L	U
acetone	100%	L	U
acrylnitrile		S	S
acetylsilicacid		S	S
adblue	Work Sol.	S	S
adipic acid	Sat. Sol.	S	S
after shave		U	U
aliphatic hydrocarbons		L	U
allyl acetate		S	L
allyl alcohol	96%	L	U
allyl chloride		L	U
aluminium chloride	Sat. Sol.	S	S
aluminium fluoride	Sat. Sol.	S	S
aluminium hydroxide	Sat. Sol.	S	S
aluminium nitrate	Sat. Sol.	S	S
aluminium oxychloride	Sat. Sol.	S	S
al/potassium sulphate	Sat. Sol.	S	S
aluminium sulphate	Sat. Sol.	S	S
alums	Sol.	S	S
aminobenzoic acid		S	S
ammonia, dry gas	100%	S	S
ammonia, liquid	100%	L	L
ammonia, aqueous	Dil. Sol.	S	S
ammonium acetate		S	S
ammonium carbonate	Sat. Sol.	S	S
ammonium chloride	Sat. Sol.	S	S
ammonium fluoride	Sol.	S	S
ammonium hexafluoro silicate	Sat. Sol.	S	S
ammonium hydrogen carbonate	Sat. Sol.	S	S
ammonium hydroxide	10%	S	S
ammonium hydroxide	30%	S	S
ammonium metaphosphate	Sat. Sol.	S	S

ammonium nitrate	Sat. Sol.	S	S
ammonium oxalate	Sat. Sol.	S	S
ammonium phosphate	Sat. Sol.	S	S
ammonium persulphate	Sat. Sol.	S	S
ammonium sulphate	Sat. Sol.	S	S
ammonium sulphide	Sat. Sol.	S	S
ammonium thiocyanate	Sat. Sol.	S	S
amyl acetate	100%	U	U
amyl alcohol	100%	L	L
amyl chloride	100%	U	U
amyl phthalate		L	L
aniline	100%	U	U
anilinchlorohydrate		L	U
antimony III chloride	Sat. Sol.	S	S
antimony trichloride	Sol.	S	S
apple juice	Sol.	S	S
aqua regia	(HC1/HN03=3/1)	U	U
aromatic hydrocarbons		U	U
arsenic acid	Sat. Sol.	S	S
asorbic acid	10%	S	S
barium bromide	Sat. Sol.	S	S
barium carbonate	Sat. Sol.	S	S
barium chloride	Sat. Sol.	S	S
barium hydroxide	Sat. Sol.	S	S
barium sulphate	Sat. Sol.	S	S
barium sulphide	Sat. Sol.	S	S
beer		S	S
benzaldehyde	100%	L	U
benzene	100%	U	U
benzoic acid	Sat. Sol.	S	S
benzoylchloride		S	L
benzyl alcohol		S	L
benzylsulphonic acid	10%	S	S
bismuth carbonate	Sat. Sol.	S	S
bitumen		S	L
bleach lye	10%	S	S
borax	Sat. Sol.	S	S
boric acid	Sat. Sol.	S	S
boron trifluoride		S	S
brake fluid		L	U
brine		S	S
bromine, dry gas	100%	U	U
bromine, liquid	100%	U	U
bromoform	100%	U	U
butandiol	10%	S	S
butandiol	60%	S	S
butandiol	100%	S	S
butanol	100%	S	L
butter		S	S
butyl acetate	100%	S	L
butyl alcohol	100%	S	S
butyl chloride		S	X
butylene glycol	10%	S	S
butylene glycol	60%	S	S
butylene glycol	100%	S	S
butyric acid	100%	L	L
calcium arsenate		S	S
calcium benzoate		S	S
calcium bisulphide		S	S
calcium bromate	10%	S	S

calcium bromide	Sat. Sol.	S	S
calcium carbonate	Sat. Sol.	S	S
calcium chlorate	Sat. Sol.	S	S
calcium chloride	Sat. Sol.	S	S
calcium chromate	40%	S	S
calcium cyanide		S	S
calcium hydrosulphide	Sol.	S	S
calcium hydroxide	Sat. Sol.	S	S
calcium hypochloride	Sol.	S	S
calcium nitrate	Sat. Sol.	S	S
calcium oxide	Sat. Sol.	S	S
calcium perchlorate	1%	S	X
calcium permanganate	20%	S	S
calcium persulphate	Sol.	S	S
calcium sulphate	Sat. Sol.	S	S
camphor oil		U	U
carbon dioxide, dry gas	100%	S	S
carbon dioxide, wet		S	S
carbon disulphide	100%	U	U
carbonic acid		S	S
carbon monoxide	100%	S	S
carbon tetrachloride	100%	U	U
Castor oil	conc	S	S
chlorine, dry gas	100%	U	U
chlorine water	2% Sat. Sol.	L	L
chlorine, aqueous	Sat. Sol.	U	U
chlorobenzene	100%	U	U
chloroethanol	100%	S	S
chloroform	100%	U	U
chloromethane, gas	100%	L	X
chloropropene		U	U
chlorosulphonic acid	100%	U	U
chlorotoluene		U	U
chrome alum	Sol.	S	S
chromic acid	Sat. Sol.	S	S
chromium VI oxide	Sat. Sol.	S	S
Cider		S	S
citric acid	Sat. Sol.	S	S
citric acid	10%	S	S
citric acid	25%	S	S
coconut oil, alcoholic		S	S
coffee		S	S
copper II chloride	Sat. Sol.	S	S
copper II cyanide	Sat. Sol.	S	S
copper II fluoride	2%	S	S
copper II fluoride	Sat. Sol.	S	S
copper II nitrate	Sat. Sol.	S	S
copper II sulphate	Sat. Sol.	S	S
corn oil		S	S
cottonseed oil		S	S
crotonaldehyde	Sat. Sol.	L	X
cyclanone		S	S
cyclohexane		U	U
cyclohexanol	Sat. Sol.	L	U
cyclohexanol	100%	U	U
cyclohexanone	100%	U	U
decahydronaphthalene	100%	L	U
decane		U	U
detergents, synthetic		S	S
dextrin	Sol.	S	S

dextrose	Sol.	S	S
diacetone alcohol		L	L
diazo salts		S	S
dibutyl amine		U	U
dibutyl ether		U	U
dibutylphthalate		L	L
dichlorobenzene		U	U
dichloroethylene		U	U
dichloropropylene		U	U
diesel oil		S	U
diethyl ether	100%	U	U
diethyl ketone		L	U
diethylene glycol		S	S
diglycolic acid		S	S
diisobutylketone	100%	S	L
dimethyl amine	100%	U	U
dimethylformamid		S	L
dioctyl phthalate	100%	L	U
dipentene		U	U
disodium phosphate		S	S
Drano, plumbing cleaner		S	S
emulsions, photographic		S	S
ethanol	100%	S	S
ethanol	40%	S	L
ethanol	96%	L	L
ethyl acetate	100%	L	U
ethyl acrylate	100%	U	U
ethyl alcohol	35%	S	S
ethyl alcohol	100%	S	S
ethyl benzene		U	U
ethyl chloride	100%	U	U
ethylene chloride	100%	U	U
ethylene diamine	100%	S	L
ethyl ether		U	U
ethylene glycol	100%	S	S
ethyl mercaptan		U	U
ferric chloride	Sat. Sol.	S	S
ferric nitrate	Sat. Sol.	S	S
ferric sulphate	Sat. Sol.	S	S
ferrous chloride	Sat. Sol.	S	S
ferrous sulphate	Sat. Sol.	S	S
fish Sol.ubles	Sol.	S	S
fluoroboric acid		S	S
fluorine gas	100%	L	U
fluorine gas, dry	100%	U	U
fluorine gas, wet	100%	U	U
fluorosilicic acid	40%	S	S
fluorosilicic acid	conc	S	L
formaldehyde	40%	S	S
formic acid	40%	S	S
formic acid	98 to 100 %	S	S
fructose sat	Sol.	S	S
fruit pulp	Sol.	S	S
furfural	100%	U	U
furfuryl alcohol	100%	L	U
gallic acid sat	Sol.	S	S
gasoline, petrol		L	U
gelatine		S	S
glucose	Sat. Sol.	S	S
glycerine	100%	S	S

glycerol	100%	S	S
glycolic acid	30%	S	L
glycolic acid	Sol.	L	U
n-heptane	100%	U	U
hexachlorobenzene		U	U
hexachlorophene		U	U
hexamethylenetriamine	40%	S	X
hexane		S	L
hexanol, tertiary		S	S
hydrobromic acid	50%	S	S
hydrobromic acid	up to 100 %	S	S
hydrochloric acid	up to 36 %	S	S
hydrochloric acid	conc	S	S
hydrochlorous acid	conc	S	S
hydrocyanic acid	10%	S	S
hydrocyanic acid	Sat. Sol.	S	S
hydrofluoric acid	40%	S	S
hydrofluoric acid	60%	S	L
hydrogen	100%	S	S
hydrogen chloride, dry gas		S	S
hydrogen peroxide	30%	S	L
hydrogen peroxide	90%	S	U
hydrogen sulphide, gas	100%	S	S
hydroquinone	Sat. Sol.	S	S
hydroxylamine	up to 12 %	S	S
inks		S	S
iodine, in potassium	Sol.	L	U
iodine, in alcohol		U	U
iron II chloride	Sat. Sol.	S	S
iron II sulphate	Sat. Sol.	S	S
iron III chloride	Sat. Sol.	S	S
iron III nitrate	Sol.	S	S
iron III sulphate	Sat. Sol.	S	S
iso octane	100%	S	U
iso pentane		U	U
isopropanol		S	S
iso propyl amine		U	U
isopropyl ether	100%	L	U
kerosene		U	U
lactic acid	10%	S	S
lactic acid	28%	S	S
lactic acid	up to 100 %	S	S
latex		S	S
lead acetate	Dil. Sol.	S	S
lead acetate	Sat. Sol.	S	S
lead arsenate		S	S
lubricating oil		S	S
lySol.		U	U
magnesium carbonate	Sat. Sol.	S	S
magnesium chloride	Sat. Sol.	S	S
magnesium hydroxide	Sat. Sol.	S	S
magnesium nitrate	Sat. Sol.	S	S
magnesium sulphate	Sat. Sol.	S	S
maleic acid	Sat. Sol.	S	S
mercury		S	S
mercury I nitrate	Sol.	S	S
mercury II chloride	Sat. Sol.	S	S
mercury II cyanide	Sat. Sol.	S	S
mercury	100%	S	S
methyl alcohol	100%	S	L

methanol	100%	S	L
methyl benzoic acid	Sat. Sol.	U	U
methyl bromide	100%	U	U
methyl chloride	100%	U	U
methylcyclohexane		L	U
methylene chloride		U	U
methoxybutanol	100%	S	L
milk		S	S
milk of magnesia		S	L
mineral oils		L	U
molasses	work conc	S	S
motor oil		S	L
naphtha		L	U
naphthalene		U	U
nickel chloride	Sat. Sol.	S	S
nickel nitrate	Sat. Sol.	S	S
nickel sulphate	Sat. Sol.	S	S
nicotine	Dil. Sol.	S	S
nicotinic acid	Dil. Sol.	L	L
nitric acid	25%	S	S
nitric acid	50%	S	L
nitric acid	70%	S	L
nitric acid	95%	U	U
nitric acid	100%	U	U
nitrobenzene	100%	U	U
nitroethane	100%	S	U
nitromethane	100%	S	X
nitrotoluene		U	U
n-octane		S	S
octyl alcohol		S	U
oils and fats		L	U
oleic acid	100%	L	U
oleum (H ₂ SO ₄ + 10% SO ₃)		U	U
oleum (H ₂ SO ₄ + 50% SO ₃)		U	U
olive oil		S	U
orthophosphoric acid	50%	S	S
orthophosphoric acid	95%	S	L
oxalic acid	Sat. Sol.	S	S
oxygen	100%	S	S
ozone	100%	U	U
paraffin oil		S	L
n-pentane		U	U
pentane-2		U	U
perchloroethylene		U	U
perchloric acid	20%	S	S
perchloric acid	50%	S	L
perchloric acid	70%	S	U
phenol	Sol.	L	U
phosphine	100%	S	S
phosphoric acid	up to 25 %	S	S
phosphoric acid	25 to 50 %	S	S
phosphoric III chloride	100%	S	L
phosphorous pentoxide	100%	S	S
phosphorous trichloride	100%	S	L
photographic Sol.utions		S	S
phtalic acid	50%	S	S
picric acid	Sat. Sol.	S	L
plating Sol.utions		S	S
pluming cleaner, Drano		S	S
potassium acetate		S	S

potassium aluminium sulphate	Sat. Sol.	S	S
potassium benzoate		S	S
potassium bicarbonate	Sat. Sol.	S	S
potassium borate	Sat. Sol.	S	S
potassium bromate	Sat. Sol.	S	S
potassium bromide	Sat. Sol.	S	S
potassium carbonate	Sat. Sol.	S	S
potassium chlorate	Sat. Sol.	S	S
potassium chloride	Sat. Sol.	S	S
potassium chromate	Sat. Sol.	S	S
potassium cyanide	Sol.	S	S
potassium dichromate	Sat. Sol.	S	S
potassium fluoride	Sat. Sol.	S	S
potassium hexacyano			
- ferrate II	Sat. Sol.	S	S
- ferrate III	Sat. Sol.	S	S
potassium hexafluoro silicate	Sat. Sol.	S	S
potassium hydrogen carbonate	Sat. Sol.	S	S
potassium hydrogen sulphate	Sat. Sol.	S	S
potassium hydroxide	10%	S	S
potassium hydroxide	Sol.	S	S
potassium hypochlorite	Sol.	S	L
potassium iodate	10%	S	S
potassium iodide	Sat. Sol.	S	S
potassium nitrate	Sat. Sol.	S	S
potassium orthophosphate	Sat. Sol.	S	S
potassium oxalate	Sat. Sol.	S	S
potassium perchlorate	Sat. Sol.	S	S
potassium permanganate	20%	S	S
potassium persulphate	Sat. Sol.	S	S
potassium phosphate	Sat. Sol.	S	S
potassium sulphate	Sat. Sol.	S	S
potassium sulphide	Sol.	S	S
potassium sulphite	Sat. Sol.	S	S
potassium thiocyanate	Sat. Sol.	S	S
potassium thiosulphate	Sat. Sol.	S	S
propargyl alcohol		S	S
n-propyl alcohol		S	S
propionic acid	50%	S	S
propylene dichloride	100%	U	U
propylene glycol		S	S
quinol	Sat. Sol.	S	S
resorcinol	Sat. Sol.	S	S
salicylic acid	Sat. Sol.	S	S
sea water		S	S
selenic acid		S	S
silicon oil		S	S
silver acetate	Sat. Sol.	S	S
silver cyanide	Sat. Sol.	S	S
silver nitrate	Sat. Sol.	S	S
soap Solution	100%	S	S
sodium acetate	Sat. Sol.	S	S
sodium antimonate	Sat. Sol.	S	S
sodium arsenite	Sat. Sol.	S	S
sodium benzoate	Sat. Sol.	S	S
sodium bicarbonate	Sat. Sol.	S	S
sodium bisulphate	Sat. Sol.	S	S
sodium bisulphite	Sat. Sol.	S	S
sodium borate	Sat. Sol.	S	S
sodium bromide	Sat. Sol.	S	S

sodium carbonate	Sat. Sol.	S	S
sodium chlorate	Sat. Sol.	S	S
sodium chloride	Sat. Sol.	S	S
sodium chlorite	Sat. Sol.	L	L
sodium cyanide	Sat. Sol.	S	S
sodium dichromate	Sat. Sol.	S	S
sodium fluoride	Sat. Sol.	S	S
sodium hexafluoro silicate	Sat. Sol.	S	S
sod hydrogen carbonate	Sat. Sol.	S	S
sod hydrogen sulphate	Sat. Sol.	S	S
sod hydrogen sulphite	Sol.	S	S
sodium hydroxide	40%	S	S
sodium hydroxide	Sol.	S	S
sodium hypochloride		L	U
sodium hypochlorite	15%	L	U
sodium iodate	10%	S	S
sodium iodide	Sat. Sol.	S	S
sodium nitrate	Sat. Sol.	S	S
sodium nitrite	Sat. Sol.	S	S
sodium ortophosphate	Sat. Sol.	S	S
sodium oxalate	Sat. Sol.	S	S
sodium phosphate	Sat. Sol.	S	S
sodium silicate	Sol.	S	S
sodium sulphate	Sat. Sol.	S	S
sodium sulphide	Sat. Sol.	S	S
sodium sulphite	Sat. Sol.	S	S
sodium thiocyanate	Sat. Sol.	S	S
stannic chloride	Sat. Sol.	S	S
stannous chloride	Sat. Sol.	S	S
starch Solution	Sat. Sol.	S	S
stearic acid	Sat. Sol.	S	L
styrene	Sol.	L	U
sulphur dioxide, dry	100%	S	S
sulphur trioxide	100%	U	U
sulphur acid	10 to 50 %	S	S
sulphuric acid	10%	S	S
sulphuric acid	50%	S	S
sulphuric acid	70%	S	L
sulphuric acid	80%	S	U
sulphuric acid	98%	L	U
sulphuric acid, fuming		U	U
sulphurous acid	30%	S	S
sulphurous acid	Sol.	S	S
tallow		S	L
tannic acid	Sol.	S	S
tartaric acid	Sol.	S	S
tartaric acid	Sat. Sol.	S	S
tetrachloroethylene	100%	U	U
tetrachloromethane	100%	U	U
tetradecane		U	U
tetrahydrofuran		U	U
tetrahydronaphthalene	100%	L	U
thionyl chloride	100%	U	U
tin II chloride	Sat. Sol.	S	S
tin IV chloride	Sol.	S	S
titanium tetrachloride	Sat. Sol.	U	U
toluene	100%	U	U
tribromomethane		U	U
trichloroacetaldehyde		S	X
trichlorobenzene		U	U

trichloroethylene	100%	U	U
triethanolamine	100%	S	X
triethanolamine	Sol.	S	L
triethylene glycol		S	S
trisodium phosphate	Sat. Sol.	S	S
turpentine		U	U
urea	Sat. Sol.	S	S
urine		S	S
vanilla extract		S	S
vaseline		S	L
vegetable oils		S	L
vinegar		S	S
water		S	S
Water, deionised		S	S
Water, distilled		S	S
Water, sea water		S	S
Water, RO		S	S
Water, waste		S	S
Water, ultra pure		S	S
wetting agents		S	S
wines and spirits		S	S
xylene	100%	U	U
yeast	Sol.	S	S
zinc bromide	Sat. Sol.	S	S
zinc carbonate	Sat. Sol.	S	S
zinc chloride	Sat. Sol.	S	S
zinc nitrate	Sat. Sol.	S	S
zinc oxide	Sat. Sol.	S	S
zinc stearate	Sat. Sol.	S	S
zinc sulphate	Sat. Sol.	S	S