RESISTANCE TO CHEMICALS

Contents

Introduction

The following tables give information on the probable performance under normal conditions of SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS.

The factors evaluated are:

- the resistance of polyolefins to chemical attack:
- the resistance of polyolefins to physical attack; and
- the permeability to the various media.

The qualifications given in the tables hold for SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS in general. The grade to be chosen depends on the application, and it will often be seen that the performance is better than indicated in the tables. Other factors having a strong influence on the performance are:

- the temperature;
- the time of contact between the polyolefin and the medium;
- the presence of internal stress; and
- the coating thickness.

Explanation

symbol	meaning	notes
+ +	good	The product has no effects on SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS.
+	fair	Less suitable grades and unfavourable conditions may give rise to difficulties.
O	doubtful	SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS are not recommended.
_	unsuited	SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS are not to be used.
V		The product gives off inflammable, toxic or malodorous vapours.
		Where + or O sign is indicated under 'permeability' it is recommended to use a polyolefin with higher density.

Diagram

In the tables on pages 6-95 the resistance of SINTABOND™ HIGH PERFORMANCE SELF ADHESIVE PLASTIC COATINGS is evaluated against various chemicals. Salts (and their solutions) whose chemicals names can be composed out of the diagram are not included in the tables. These salts have no influence on polyolefins, neither in the solid state nor in the form of aqueous solutions.

aluminium	Acetate	cobalt acetate
ammonium	arsenate	
antimony	benzoate	
barium	borate	
bismuth	bromate	
cadmium	bromide	
calcium	carbonate	
chromium	chlorate	
cobalt	chloride	
copper	chromate	
iron	Bicarbonate	
lead	dichromate	
lithium	disulphate	
magnesium	ferric cynanide	
manganese	ferrous cynanide	
mercury	fluoride	
molybdenum	formiate	
nickel	gluconate	
potassium	hydrosulphate	
silver	hyposulphite	
sodium	iodate	
strontium	iodite	
thalium	metaphosphate	
tin	molybdate	
zinc	nitrate	
	nitrite	
	oxalate	
	perborate	
	persulphate	
	rhodanide	
	salicylate	
	silicate	
	silicofluoride	
	sulphate	
	sulphite	
	tartrate	
	thiosulphate	
	titanate	
	tungstate	

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
Acetaldehyde	+ +	+ +	O	O	-	V
acetanilide	+ +	+ +	+ +	+ +	+ +	
acetid acid 5%	+ +	+ +	+	+ +	+ +	
acetic acid 50%	+ +	+ +	+	+	+	V
acetic anhydride	+ +	+ +	O	O	O	V
acetophenonc	+ +	+ +	+	O	-	V
acetone	+ +	+ +	O	O	-	V
acetylsalicylic acid	+ +	+ +	+ +	+ +	+ +	
acrylonitrile	+ +	+ +	+	O	-	V
adipic acid	+ +	+ +	+	+	+	
alcohol	+ +	+ +	O	+	+	
allylacohol	+ +	+ +	+	O	O	V
alum (all types)	+ +	+ +	+ +	+ +	+ +	
aluminium oxide	+ +	+ +	+ +	+ +	+ +	
aluminium salts						*
amino acids	+ +	+ +	+ +	+ +	+ +	
ammonia	+ +	+ +	+ +	+ +	+ +	**
ammonium-nitrate lime	+ +	+ +	+ +	+ +	+ +	
ammonium salts						*
amylacetate	+ +	+ +	O	O	-	V
amylalcohol	+ +	+ +	+	+	+	V
aniline	+ +	+ +	O	O	O	V
aniline dyes, - dry						
- water-soluble	+ +	+ +	+ +	+	+	
- oil-soluble	+ +	+ +	+	+	+	
aniline salts	+ +	+ +	+	+	+	
aniseed oil	+ +	+ +	+	-	-	V
anisole	+ +	+ +	O	O	-	V
anthraquinone	+ +	+ +	+	+ +	+ +	
antifreeze	+ +	+ +	+	+ +	+ +	
antimony	+ +	+ +	+ +	+ +	+ +	
antinomy compounds						*
aqua regia	-	-	O	+ +	+ +	***
arsenic	++	++	++	++	++	
arsenic trioxide	+ +	+ +	+ +	+ +	+ +	
aspirin	+ +	+ +	+ +	+ +	+ +	
atropine and its salts	+ +	+ +	+ +	+ +	+ +	
Barium hydroxide	+ +	+ +	+	+ +	+ +	**
barium sulphide	+ +	+ +	+ +	+	+ +	
barium salts						*
battery acid	+ +	+ +	+ +	+ +	+ +	
beer	+ +	+ +	+ +	+	+	$C0_2$-pressure
benzaldehyde	+ +	+ +	O	O	-	V
benzene (benzole)	+ +	+ +	+	-	-	V
benzene hexachloride	+ +	+ +	+	+	+	V
benzene sulphonic acid	+ +	+ +	O	+ +	+ +	
benzoic acid	+ +	+ +	+	+ +	+ +	
benzyl acetate	+ +	+ +	+	-	-	V
benzyl alcohol	+ +	+ +	O	+	+	V
bicarbonate of soda	+ +	+ +	+ +	+ +	+ +	
bicarbmate sulphuric acid	O	-	+	+ +	+ +	
bicycle oil	+ +	+ +	+	O	O	

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
bismuth trichloride	+ +	+ +	O	+	+	
bismuth compounds						*
bitumen	+ +	+ +	+	O	O	V
blankite	+ +	+ +	+ +	+ +	+ +	(permeable to
bleaching liquor	+	-	+ +	+ +	+ +	O_2 : **)
bleaching lye	+	-	++	++	++	
bleaching powder	+ +	+	+ +	+ +	+ +	
blue ashes	++	++	++	++	++	
borax	++	++	++	++	++	
boric acid	++	++	++	++	++	
boric acid solution	+ +	+ +	+ +	+ +	+ +	
braking fluids	+ +	+ +	O	+	+	
brass polish	+ +	+ +	+	+ +	+ +	
brillantine	+ +	+ +	+	+	O	
brine	++	++	++	++	++	
bromine	-	-	-	-	-	
bromobenzene (-benzole)	+ +	+ +	+		-	
bromophorm	+ +	+ +	+		-	
butane diol	+ +	+ +	+	+ +	+ +	
butanol	+ +	+ +	+	+	+	V
butter	+ +	+ +	+	+	O	**
butyl acetate	+ +	+ +	O		-	V
butyl alcohol	+ +	+ +	+	+	+	V
butyl chloride	+ +	+ +	+		-	
butyl phenol	+ +	+ +	O	+	O	
butyraldehyde	+ +	+ +	O	O	O	
butyric acid	+ +	+ +	O	+	+	V
Cadmium salts						*
cadmium sulphide	+ +	+ +	+ +	+ +	+ +	
caffeine and its salts	+ +	+ +	+ +	+ +	+ +	
calcium hydroxide	+ +	+ +	+ +	+ +	+ +	**
calcium hypochlorite	+ +	+	+ +	+ +	+ +	
calcium salts						*
californian mixture	++	++	++	++	++	**
caramel	+ +	+ +	+ +	+ +	+ +	
camphor	+ +	+ +	O	O	O	V
camphor oil	+ +	+ +	+	O	O	V
caprolactam	+ +	+ +	+	+ +	+ +	
carbazole	+ +	+ +	+ +	+	O	V
carbolineum	+ +	+ +	O	O	-	V
carbon black	+ +	+ +	+ +	+ +	+ +	
carbon disulphide	+ +	+ +	+		-	
carbon tetrachloride	+ +	+ +	+		-	
carnauba wax	+ +	+ +	+	+	+	
castor oil	+ +	+ +	O	+	O	
cattle feed	+ +	+ +	+ +	+ +	+ +	
caustic potash	+ +	+ +	+	+ +	+ +	**
caustic soda	++	++	+	++	++	**
cellosolve	+ +	+ +	+	+	O	
cellulose varnish	+ +	+ +	O		-	
cetyl alcohol	+ +	+ +	+	+	+	
chloro-acetic acids	+ +	+ +	O	+ +	+ +	V

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
chloral (+chloral hydrate)	+ +	+ +	O	O	O	V
chloroamine	+ +	+ +	+ +	+ +	+ +	
chloroform	+ +	+ +	+	-	-	
chlorobcnzene(-benzolc)	+ +	+ +	+	-	-	
chloronitrobenzcne						
- solid	+ +	+ +	+	+		V
- liquid	+ +	+ +	O	O		V
chlorophenol (mono, etc.)	+ +	+ +	+	O	-	V
chloropropionic acid	+ +	+ +	O	+ +		
chlorosulphonic acid						***
chromate yellow	+ +	+ +	+ +	+ +	+ +	
chromic acid	+	-	+	+ +	+ +	
chromium salts						*
cinnamon	+ +	+ +	+ +	+	+	V
cinnamon oil	+ +	+ +	+	-	-	
citric acid	+ +	+ +	+ +	+ +	+ +	
citronel oil	+ +	+ +	+	-	-	
cloves	+ +	+ +	+	+	+	V
clove oil	+ +	+ +	+	O	O	V
cobalt salts						*
coconut oil	+ +	+ +	+	+	+	
coconutfat	+ +	+ +	+	+ +	+ +	
codliver oil	+ +	+ +	+	+	+	**
coffee	+ +	+ +	+ +	O	O	V
colophonium (resin)	+ +	+ +	+ +	+ +	+ +	
copper green	+ +	+ +	+ +	+ +	+ +	
copper oxide	+ +	+ +	+ +	+ +	+ +	
copper oxychloride	+ +	+ +	+ +	+ +	+ +	
copper salts						*
cotton-seed oil	+ +	+ +	+	+	O	
cream (face, hands)	+ +	+ +	+	+	+	
creolin	+ +	+ +	O	O	-	V
creosote	+ +	+ +	O	O	-	
cresol (ortho, meta, para)	+ +	+ +	O	O	O	V
crude oils (minerals)	+ +	+ +	O	O	O	V
cyanamide	+ +	+ +	+ +	+ +	+ +	
cyclohexane	+ +	+ +	O	O	-	V
cyclohexanol	+ +	+ +	O	+	+	V
cyclohexanone	+ +	+ +	O	O	O	V
DDT (powder)	+ +	+ +	+	+ +	+ +	
decalin	+ +	+ +	+	-	-	
detergents (powder)	+ +	+ +	+	+ +	+ +	
detergents (liquid)	+ +	+ +	O	+ +	+ +	
developer (phot.)	+ +	+ +	+ +	+ +	+ +	
dextrin	+ +	+ +	+ +	+ +	+ +	
dibutyl phthalate	+ +	+ +	O	+	+ +	
dichlorobenzene (-benzolc)	+ +	+	+	-	-	
dichlorocthylene	+ +	+ +	+	-	-	
dichloromethane	+ +	+ +	+	-	-	
diesel oil	+ +	+ +	+	O	O	V
diethanol amine	+ +	+ +	+	+ +	+ +	**
diethylene glycolether	+ +	+ +	O	+	+	V

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
diethyl ether	+ +	+ +	+ +	-	-	
diethyl ketone	+ +	+ +	O	O	-	
dimethyl formamide	+ +	+ +	+	+	+	
dicotyl phthalate	+ +	+ +	+	+	+	
dioxane	+ +	+ +	O	O	O	V
diphenyl amine	+ +	+ +	+	+	+	V
diphenyl ether	+ +	+ +	+	O	-	V
diphenyl oxide	+ +	+ +	+	O	-	V
dolomite	+ +	+ +	+ +	+ +	+ +	
Eau de cologne	+ +	+ +	+	O	O	V
eau de Javelle	+	-	+ +	+ +	+ +	
emulsion paint	+ +	+ +	+ +	+ +	+ +	
engine oil	+ +	+ +	+	O	O	
epsom salts	+ +	+ +	+ +	+ +	+ +	
ether	+ +	+ +	O	-	-	V
etheric oil	+ +	+ +	+	-	-	
ethyl acetate	+ +	+ +	O	O	-	V
ethyl alcohol	+ +	+ +	+	+	+	
ethyl aniline	+ +	+ +	+	O	O	V
ethyl benzene (-benzole)	+ +	+ +	+	-	-	
ethyl benzoate	+ +	+ +	O	O	O	V
ethyl chloride	+ +	+ +	+	-	-	
ethylene chloride (mono, di)	+ +	+ +	+	-	-	
ethylene chlorohydrine	+ +	+ +	+	-	-	
ethylene diamine	+ +	+ +	+	+	+	V. **
ethylene glycol	+ +	+ +	+	+ +	+ +	
ethylene salicylate	+ +	+ +	+	O	O	V
Ferric salts						*
ferrous salts						*
fertilizer	+ +	+ +	+ +	+ +	+ +	
fir-needle oil	+ +	+ +	+	-	-	V
fixative (phot.)	+ +	+ +	+ +	+ +	+ +	
floor wax	+ +	+ +	O	O	O	
formaldehyde 40%	+ +	+ +	+	+	+	V
formaline	+ +	+ +	+	+	+	V
formamide	+ +	+ +	+	+	+	
formic acid	+ +	+ +	+	+ +	+ +	V
freon	+ +	+ +	+	-	-	
frigen	+ +	+ +	+	-	-	
fruit juice	+ +	+ +	+ +	+ +	+ +	
fuel oil	+ +	+ +	+	O	O	
fuel oil (domestic use)	+ +	+ +	+	O	O	V
fungicides	+ +	+ +	+ +	+ +	+ +	
furfural	+ +	+ +	+	O	O	V
furfuryl alcohol	+ +	+ +	O	-	-	
Gallic acid (tannic acid)	+ +	+ +	+	+ +	+ +	
galvanizing liquor	+ +	+ +	+ +	+ +	+ +	
gas liquor	+ +	+ +	+	+	+	
gasoline	+ +	+ +	+	O	-	V, HD grades
glacial-acetic acid	+ +	+ +	O	O	O	V

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
dauber salt	+ +	+ +	+ +	+ +	+ +	
glucose	+ +	+ +	+ +	+ +	+ +	
glue (fish, bone)	+ +	+ +	+ +	+ +	+ +	
glycerine (glycerol)	+ +	+ +	+ +	+ +	+ +	
glycol	+ +	+ +	+	+ +	+ +	
gypsum	+ +	+ +	+ +	+ +	+ +	
Heptane	+ +	+ +	+	-	-	
hexane	+ +	+ +	+	-	-	
hexachlorocyclohexane	+ +	+ +	+	+	+	V
hexanol	+ +	+ +	+	+	+	V
hexylalcohol	+ +	+ +	+	+	+	V
honey	+ +	+ +	+ +	+ +	+ +	
hydrobomic acid	+ +	+ +	+ +	+ +	+ +	
hydrochloric acid	+ +	+ +	+ +	+ +	+ +	
hydrochloric acid (chem. pure)	+ +	+ +	+ +	+ +	+ +	
hydrocyanic acid	+ +	+ +	+	O	O	V, **
hydofluoric acid	+ +	+ +	+	+	+	V, **
hydrogen peroxide (sol.)	+	+	+ +	+ +	O	
hydroquinone	+ +	+ +	+ +	+ +	+ +	
hypo	+ +	+ +	+ +	+ +	+ +	
Ink (printing ink)	+ +	+ +	+	+	O	
ink (writing ink)	+ +	+ +	+ +	+ +	+ +	
insecticides (aqueous dispersion)	+ +	+ +	+	+ +	+ +	
insecticides (oil-solution)	+ +	+ +	O	-	-	
insecticides	+ +	+ +	+	+	+	
iodine	+ +	+ +	+	O	O	
iodine tincture	+ +	+ +	+	+	O	
iron salts						*
isobutanol	+ +	+ +	+	+	+	V
isobutyl alcohol	+ +	+ +	+	+	+	V
iso-octane (see gasoline)	+ +	+ +	+	O	+	V
isopropyl acetate	+ +	+ +	+	O	+	V
isopropyl ether	+ +	+ +	+	-		
Jam	+ +	+ +	+ +	+ +	+ +	
Kerosene (see gasoline)	+ +	+ +	+	O	-	V
ketchup	+ +	+ +	+ +	+ +	+ +	
Lactic acid	+ +	+ +	+	+ +	+ +	
lanolin	+ +	+ +	+	+	+	
lard	+ +	+ +	+	+	O	
latex	+ +	+ +	+	+ +	+ +	
lauryl alcohol	+ +	+ +	+	+	+	
lauryl sulphate	+ +	+ +	O	+	+ +	
lead acetate	+ +	+ +	+ +	+ +	+ +	
lead oxide	+ +	+ +	+ +	+ +	+ +	
lead salts						*
lemon oil	+ +	+ +	+	-	-	
lime milk	+ +	+ +	+	+ +	+ +	
lime salts						*

	resistance to chemical allack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
lime, slaked	+ +	+ +	+ +	+ +	+ +	
lime, unslaked	+ +	+ +	+ +	+ +	+ +	
lindane powder	+ +	+ +	+	+	+	
linseed oil	+ +	+ +	+	+	O	
lithium salts						*
liver of sulphur (see sodium sulphide)						
lotion (hair, shaving)	+ +	+ +	+	+	O	
lubricating oil	+ +	+ +	+	O	O	
Magnesia	+ +	+ +	+	+ +	+ +	
magnesium oxide	+ +	+ +	+	+ +	+ +	
magnesium salts						*
maleic acid	+ +	+ +	+	+ +	+ +	
manganese salts						*
margarine	+ +	+ +	+	+	O	
mayonnaise	+ +	+ +	+	+ +	O	
menthol	+ +	+ +	+	+	O	V
mercuric salts						*
mercurochrome	+ +	+ +	+ +	+ +	+ +	
mercurous salts						*
mercury (metal)	+ +	+ +	+ +	+ +	+ +	
mercury oxide	+ +	+ +	+ +	+ +	+ +	
mercury salts						*
methanol	+ +	+ +	O	+	+	
methyl acetate	+ +	+ +	O	O	O	V
methyl alcohol	+ +	+ +	O	+	+	
methylene chloride	+ +	+ +	+	-	-	
methylethyl ketone	+ +	+ +	O	O	-	
methyl salicylate	+ +	+ +	+	O	O	V
milk	+ +	+ +	+ +	+ +	+ +	
mineral oil	+ +	+ +	+	+	O	
minerals	+ +	+ +	+ +	+ +	+ +	
Mohr's salt	+ +	+ +	+ +	+ +	+ +	
monochlorobenzene (-benzole)	+ +	+ +	+	-	-	
morpholine	+ +	+ +	O	+	+	V
mustard	+ +	+ +	+ +	+ +	+ +	
Nail varnish	+ +	+ +	O	O	-	
naphthalene	+ +	+ +	+	O	O	V
nickel oxide	+ +	+ +	+ +	+ +	+ +	
nickel salts						
nicotine	+ +	+ +	+	+	+	
nictric acid (< 50%)	+	-	+	+ +	+ +	
nitric acid (> 50%)	-	-	O	+	+	
nitrobenzene (-benzole)	+ +	+ +	O	O	O	V, ***
nitrocresole	+ +	+ +	+	O	O	
nitrogylcerine	+ +	+ +	+	O	O	
nonyl alcohol	+ +	+ +	+	O	O	V
nutmeg	+ +	+ +	+ +	O	O	V
nutmeg oil	+ +	+ +	+	-	-	
Ochre	++	++	++	++	++	
octane (see gasoline)	+ +	+ +	+	O	-	V

	resistance to chemical attack		resistance to physical attack	permeability		notes
	20°C	60°C		20°C	60°C	
octanol	+ +	+ +	+	O	O	
octyl alcohol	+ +	+ +	+	O	O	V
oleum	O	-	O	+	+	***
oleic acid	+ +	+ +	+	+	O	
olive oil	+ +	+ +	+	+	O	
oxalic acid (solid or solution)	+ +	+ +	+ +	+ +	+ +	
Paint see 'turpentine varnish' and 'emulsion paint'						
palmitinic acid	+ +	+ +	+	+ +	+ +	
palm oil	+ +	+ +	+	+	O	
parafin (solid)	+ +	+ +	+	+ +	+ +	
parafin oil	+ +	+ +	+	O	-	
patent potash	+ +	+ +	+ +	+ +	+ +	
peanut butter	+ +	+ +	+	+	O	
pentane	+ +	+ +	+	-	-	
pentachlorophenol	+ +	+ +	+ +	O	O	V
pepper	+ +	+ +	+ +	+ +	+ +	
peppermint oil	+ +	+ +	+	-	-	V
perchloroethylene	+ +	+ +	+	-	-	
perchloric-acid solution	+	O	+ +	+ +	+	
perfumes	+ +	+ +	+	O	-	V, ***
petrol (see gasoline)						
petroleum	+ +	+ +	+	O	-	V
petroleum ether	+ +	+ +	+	O	-	V
phenol	+ +	+ +	O	+	+	V
phenol sulphonic acid	+ +	+ +	+	+ +	+ +	
phenoxy-acetic acid	+ +	+ +	+	+ +	+ +	
phenyl phenol	+ +	+ +	+	+	+	
phosphating liquor (for metal)	+ +	+ +	+ +	+ +	+ +	
phosphor chlorides (tri, penta, oxychloride)						***
phosphoric acid (cone.)	+ +	+ +	+	+	+	
phthalic acid	+ +	+ +	+ +	+ +	+ +	
phthalc anhydride	+ +	+ +	+ +	+ +	+ +	
pigments, dry (for paints, plastics. etc.)	+ +	+ +	+ +	+ +	+ +	
picrinic acid	+ +	+ +	+	+	+	
pine oil	+ +	+ +	O	O	O	V
pitch	+ +	+ +	+	+ +	+ +	
potash	+ +	+ +	+ +	+ +	+ +	
polishing wax	+ +	+ +	+	O	O	
potassium bromide	+ +	+ +	+ +	+ +	+ +	
potassium cyanide	+ +	+ +	+	+	+	**,hazardous
potassium hydroxide	+ +	+ +	+	+ +	+ +	**
potassium iodide	+ +	+ +	+ +	+ +	+ +	
potassium permanganate	+	+	+ +	+ +	+ +	
potassium salts						*
potassium sulphate						*
potassium sulphide	+ +	+ +	+	+	+ +	permeable to O_2**
propanol	+ +	+ +	+	+	+	
propargyl.alcohol	+ +	+ +	+	+	+	
propionic acid	+ +	+ +	O	+ +	+ +	V
propyl alcohol	+ +	+ +	+	+	+	
propylene gylcol	+ +	+ +	+	+ +	+ +	
prussic acid	+ +	+ +	+	O	O	V, very

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
pyridine	+ +	+ +	O	O	O	V
Quinine and Its salts	+ +	+ +	+ +	+ +	+ +	
Ratbane	++	++	++	++	++	
red ochre						
resorcine (resorcinol)	+ +	+ +	+ +	+ +	+ +	
ricinus oil	+ +	+ +	O	+	O	
Salad oil	+ +	+ +	+	+	O	
salad sauce	+ +	+ +	+	+ +	O	
salicyl aldehyde	+ +	+ +	+	O	O	V
salicylic acid	+ +	+ +	+ +	+ +	+ +	
salmiac	+ +	+ +	+ +	+ +	+ +	
saltpetre (nitrate)						*
saponin	+ +	+ +	+ +	+ +	+ +	
scouring powder	+ +	+ +	+	+ +	+ +	
sesame oil	+ +	+ +	+	+	O	
shampoo	+ +	+ +	O	+	+	
silicone oil	+ +	+ +	O	+	+	
silver polish	+ +	+ +	+	+ +	+ +	
silver salts						*
soap (soft, green and yellow)	+ +	+ +	O	+ +	+ +	
soda	++	++	++	++	++	
sodium cyanide	+ +	+ +	+	+	+	hazardous
sodium hydroxide	+ +	+ +	+	+ +	+ +	**
sodium hypochlorite	+	-	+	+ +	+ +	
sodium salts						*
sodium sulphide	+ +	+ +	+	+	+	permeable to 0_2 **
soldering fluid	+ +	+ +	+ +	+ +	+ +	
solvent naphtha	+ +	+ +	+	-	-	
soy oil	+ +	+ +	+	+	O	
spermaceti	+ +	+ +	+	+	+	
spindle oil	+ +	+ +	+	O	O	
spirit	+ +	+ +	+	+	+	
stannic salts (tin)						*
stannous salts (tin)						*
starch	+ +	+ +	+ +	+ +	+ +	
stearic acid	+ +	+ +	+ +	+ +	+ +	
strontium salts						*
styrene (styrol)	+ +	+ +	+	O	-	
sublimate	+ +	+ +	+ +	+ +	+ +	
succinic acid	+ +	+ +	+ +	+ +	+ +	
sucrose	+ +	+ +	+ +	+ +	+ +	
sugar	+ +	+ +	+ +	+ +	+ +	
sulphate of ammonia						
sulphur	+	+ +	+ +	+ +	+ +	
sulphuric acid (dilute)	+ +	+ +	+ +	+ +	+ +	
sulphuric acid (50-90%)	+	+	+	+ +	+ +	
sulphuric acid (90-100%)	O	O	+	+ +	+ +	
sulphur chloride						**
sulphur trioxide	O	-	O	+	O	V, ***
sulphuryl chloride						***

	resistance to chemical attack 20°C	60°C	resistance to physical attack	permeability 20°C	60°C	notes
superphosphate	+ +	+ +	+ +	+ +	+ +	
syrup	+ +	+ +	+ +	+ +	+ +	
Talcum grease	+ +	+ +	+	+	O	
talcum powder	+ +	+ +	+ +	+ +	+ +	
tannic acid	+ +	+ +	+	+ +	+ +	
tannin	+ +	+ +	+	+ +	+ +	
tar oil	+ +	+ +	O	O	O	V
tartaric acid	+ +	+ +	+ +	+ +	+ +	
tea	+ +	+ +	+ +	+ +	+ +	
tetra, see 'carbon tetrachloride'						
tetrachloroethane	+ +	+ +	+	-	-	
tetra-ethyl lead						
tetrahydrofuran	+ +	+ +	O	-	-	
tetralin	+ +	+ +	+	-	-	
thalium salts						*
thio (sodium thiosulphate)						*
thioglycolic acid	+ +	+ +	+	O	O	V
thionylchloride						***
thiophene	+ +	+ +	O	-	-	
thomas meal	+ +	+ +	+ +	+ +	+ +	
tin compounds						*
titanium tetrachloride						***
titanium white	+ +	+ +	+ +	+ +	+ +	
toluene (toluol)	+ +	+ +	+	-	-	V
tomato juice	+ +	+ +	+ +	+ +	+ +	
toothpaste	+ +	+ +	+	+	+	
transformer oil	+ +	+ +	+	O	O	
trichloro-acetic acid	+ +	+ +	O	+	O	V
trichlorobenzene (-benzole)	+ +	+ +	+	-	-	
trichloroethanc	+ +	+ +	+	-	-	
trichloroethylene	+ +	+ +	+	-	-	
tricresylphosphate	+ +	+ +	O	+	+	
triethanolamine (turkey red oil)	+ +	+ +	O	+ +	+ +	
turkey red oil	+ +	+ +	+	+	+	
turpentine	+ +	+ +	+	-	-	
turpentine (synthetic)	+ +	+ +	+	O	-	
turpentine varnish	+ +	+ +	+	O	-	(permeable to
Urea	+ +	+ +	+ +	+ +	+ +	
Vanilla extract	+ +	+ +	+	O	O	V
varnish, see 'turpentine varnish'						
vaselin	+ +	+ +	+	+	O	
vinegar	+ +	+ +	+ +	+ +	+ +	
vinylchloride	+ +	+ +	+	-	-	
Waterglass	+ +	+ +	+	+ +	+ +	
wax						
- mineral-oil wax	+ +	+ +	+	+	O	
- beeswax	+ +	+ +	+	+	+	
- Carnauba wax	+ +	+ +	+	+	+	
white lead	+ +	+ +	+ +	+ +	+ +	

* see diagram on page 5: *** not recommended.

	resistance to chemical attack 20°C	60°C	resistance to physical attack	Permeability 20°C	60°C	notes
white spirit	+ +	+ +	+	O	-	
Xylene (xylol)	+ +	+ +	+	-	-	
Yeast	+ +	+ +	+ +	+ +	+ +	
yoghurt	+ +	+ +	+ +	+ +	+ +	
Zinc Saits						
zinc white	+ +	+ +	+ +	+ +	+ +	

see diagram on page 5.

All information is given in good faith but without warranty

*** not recommended.