

Technical Specification

TDS103/03

TELBAK Flexible PVC

Chemical Resistance Data

Telbak Plate Surfaced Flexible PVC Sheet is resistant to a wide range of chemicals. The list below is provided as an aid for the user to help them establish the potential suitability of Telbak flexible PVC sheet for their specific application. Telegan would recommend that users should carry out relevant field trials using this information as a quideline, since the conditions of exposure for each application can vary wildly.

Acids

Telbak is resistant to attack by dilute acids at room temperature, although there may be some discolouration of the surface.

Alkalis

Aqueous solutions of alkalis such as ammonia, caustic potash and caustic soda do not attack Telbak except in high concentrations at elevated temperatures.

Oils

Telbak has greater resistance to oils than polythene, although exposure over several years will result in some softening and slight swelling. Some oils may contain additives which could affect Telbak.

Inorganic Compounds

Telbak is not attacked by the aqueous solutions of most inorganic compounds and suitable formulations. It is not attacked by shampoos, photographic fixers and developers, or many disinfectants.

Organic Compounds

Telbak is not suitable for contact with chlorinated hydrocarbons, ketones, esters and ethers. Aliphatic hydrocarbons can be absorbed, and on subsequent drying can result in the material hardening and cracking. The effect of alcohols, such as ethyl and methyl alcohol, is similar.

Key to chemical resistance table

A - Satisfactory

Telbak may be used up to the temperatures and concentrations quoted.

B – Some attack or Absorption

Telbak may be considered where limited life is acceptable. When Telbak is to be used with these chemicals and conditions, users must carry out full-scale trials under working conditions as similar as is possible to those likely to be experienced in application.

C - Unsatisfactory

Absorption, swelling, decomposition, embrittlement and loss of strength may be experienced.

Chemical	Concentration (%)	20°C	60°C
Acetaldehyde,	100	С	С
Acetic acid,	25-85	В	С
Glacial		С	С
Acetone,	100	С	С
Alum	-	Α	Α
Aluminium chloride	-	Α	Α
Acetone	100	С	С
Ammonia, aqueous;	10	Α	Α
	28	В	В
Ammonium chloride	-	Α	Α
Ammonium sulphate	-	Α	Α
Aniline	-	С	С
Arsenic acid	30	Α	Α
Benzene	100	С	С
Benzoic acid	-	Α	Α
Bleach (hypochlorite)	-	В	В
Borax	-	Α	Α
Boric acid	-	Α	Α
Brass plating solution	-	Α	Α
Bromine, liquid	-	С	С
Bromine vapours	-	С	С
Butadiene	100	С	С

The information contained in this document is correct to the best of our knowledge but results may vary depending on the conditions under which the material is used and consequently recommendations are made without warranty or guarantee.

Chemical	Concentration (%)	20°C	60°C
Butanol,	100	С	С
Butyric acid,	100	С	С
Cadmium cyanide plating solution	-	Α	Α
Calcium chloride	-	Α	Α
Carbon dioxide	-	Α	Α
Carbon disulphide	-	С	С
Carbon monoxide	-	Α	Α
Carbon tetrachloride,	-	В	С
Caustic potash solution, aqueous	30	Α	Α
	50	В	С
Caustic soda, aqueous	40	Α	В
Chlorine, gaseous, dry	-	В	С
gaseous, wet	-	С	С
Chlorine, liquid	-	С	С
Chlorine, gaseous, dry	-	В	С
Chromic acid	30	Α	В
	50	В	С
Citric acid	50	Α	Α
Copper cyanide plating solution	-	Α	Α
Copper (High speed) plating solution	-	Α	Α
Copper sulphate	-	Α	Α
Cresol (commercial)	90	С	С
Cyclohexanone	100	С	С
Dextrin	-	Α	Α
Diesel	-	Α	В
Di-sodium phosphate	-	Α	Α
Ethyl acetate	100	С	С
Ethyl alcohol, aqueous,	96	С	С
Ethyl ether	100	С	С
Ethyl lactate	100	С	С
Ethylene dibromide	100	С	С
Ethylene glycol	100	В	В
Ferric chloride	-	Α	Α
Fixing bath (photographic)	-	Α	
Fluoboric acid	-	Α	Α
Fluosilicic acid	38	Α	В
Formaldehyde	37	В	В

Chemical	Concentration (%)	20°C	60°C
Formic acid	50	В	
Glucose	-	Α	Α
Glycerine	100	В	В
Gold plating solution	-	Α	Α
Hydrobromic acid, dilute	-	В	В
Hydrochloric acid, aqueous	25	Α	Α
Hydrofluoric acid	40	В	С
Hydrofluosilicic acid	10	Α	Α
Hydrogen peroxide	10	Α	
	30	Α	
Hydrogen sulphide, dry	-	Α	Α
moist	-	Α	В
Indium plating solution	-	Α	Α
Iodine	-	В	С
Lactic acid	90	С	С
Lead acetate, dilute	-	В	
Lubricating oil	-	В	
Magnesium salts	-	Α	Α
Mercuric chloride	-	Α	Α
Methyl alcohol	100	С	С
Methyl methacrylate	100	С	С
Methylene chloride	100	С	С
Methyl ethyl ketone	100	С	С
Nickel (bright) plating solution	100	Α	Α
Nitric acid	30	Α	В
Nitrobenzene	100	С	С
Nitrogycerin	100	С	С
Nitrous oxides, concentrated	-	С	С
Oxalic acid	-	Α	В
Oxygen	-	Α	Α
Perchloric acid	-	Α	Α
Petrol	100	С	С
Phosphor-trichloride	-	С	С
Phosphoros pentoxide	100	Α	
Picric acid	-	Α	Α
Potassium cyanide	-	Α	Α
Potassium dichromate	-	Α	Α

Chemical	Concentration (%)	20°C	60°C
Potassium Ferricyanide	-	Α	Α
Potassium Ferrocyanide	-	Α	Α
Potassium hydroxide	30	Α	Α
	50	В	
Potassium persulphate	-	Α	
Pyrogallic acid	20	Α	Α
Rhodium plating solution	-	Α	Α
Silver nitrate	-	Α	В
Silver plating solution	-	Α	Α
Sodium bisulphate	-	Α	Α
Sodium bisulphate, dilute	-	Α	Α
Sodium borate	-	Α	Α
Sodium chloride	-	Α	Α
Sodium cyanide	-	Α	Α
Sodium hydroxide	40	Α	В
Sodium hypochlorite	15	Α	В
Sodium thiosulphate	-	Α	Α
Stannic chloride	-	Α	Α
Sulphur dioxide, dry	-	Α	Α
Moist	-	Α	В
Sulphurous acid	-	Α	Α
Sulphuric acid	60	Α	Α
	96	С	С
Toluene	100	С	С
Transformer oil	100	С	С
Trichloroethylene,	100	С	С
Turpentine	100	В	С
Urea	-	Α	Α
Xylene,	100	С	С
Zinc plating solution	-	Α	Α
Zinc sulphate	-	Α	Α

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