

Symbols:

	stable
	conditionally stable no chemical destruction, use value is adversely influenced.
	unstable no use value

Concentration data:

Ac	= any concentration
Tr	= traces
Sc	= small concentration
Ntc	= normal trade concentration
S	= cold saturated at 20°C
C	= concentrated

I. Anorganic substances		Alkorplan		Alkorflex	
		temperature		temperature	
	Conc. %	23°C	50°C	23°C	50°C
a. Acids and bases					
gaseous ammonia	100				
liquid ammonia	100				
chromic acid	10				
potassium hydroxide solution	10				
potassium hydroxide solution	≤ 35				
aqueous lactic acid	50				
sodium hydroxide	10				
sodium hydroxide	≤ 50				
aqueous phosphoric acid	≤ 50				
nitric acid	10				
nitric acid	50				
hydrochloric acid	37				
hydrochloric acid	10				
sulphuric acid	50				
sulphuric acid	96				
sulphuric anhydride					
b. aqueous solutions					
ammonium hydroxide	10				
ammonium hydroxide	32				
ammonium nitrate	S				
ammonium sulphate	S				
ammonium chloride	S				
calcium chloride	≤ S				
calcium nitrate	≤ S				
calcium phosphate	Ac				
calcium sulphate	Ac				
fertiliser salts	S				
aqueous potassium carbonate	S				
potassium bichromate	≤ 40				
potassium chloride	S				
potassium chromate	10				
potassium nitrate	S				
potassium perchlorate	S				
potassium permanganate	S				
potassium sulphate	Ac				
copper sulphate	S				
magnesium chloride	S				
soda carbonate	10				

II. organic substances		Alkorplan		Alkorflex	
		temperature		temperature	
	Conc. %	23°C	50°C	23°C	50°C
exhaust gases, containing carbonic acid	Ac				
exhaust gases, containing nitrose acid	Tr				
exhaust gases, containing hydrochloric acid	Ac				
exhaust gases with sulphuric acid	Ac				
exhaust gases with SO ²	Sc				
acetone	100				
anone	100				
asphalt					
ethylene chloride	100				
gasoline	100				
benzol					
butanol	100				
aqueous butyric acid	20				
butyric acid	C				
butyl acetate	100				
cyclohexane	100				
diesel oil	Ntc				
dimethylformamide	100				
aqueous acetic acid	10				
aqueous acetic acid	100				
acetic acid anhydride	C				
jet fuel <kerosene)	Ntc				
aqueous formaldehyde	≤ 40				
glycol	100				
glycerine (aqueous/pure)	Ac				
Urea	33				
isooctane	Ntc				
methyl alcohol	≤100				
methylene chloride	100				
perchlorethylene	Ntc				
turpentine	Ntc				
tetrahydrofurane	Ntc				
toluol	Ntc				
trichlorethylene	Ntc				
xylol	Ntc				
petroleum	Ntc				
chloroform	Ntc				

III. foods and miscellaneous

ethyl alcohol	10	+	±	+	+
ethyl alcohol	96	±	-	+	+
bleaching lye	12,5	-	-	+	+
sodium hypochloride	5	+	±	+	+
sodium hypochloride	12,5	±	-	+	+
vinegar		±	-	+	+
heating oils		-	-	±	-
cooking salt	S	+	+	+	+
seawater		+	+	+	+
urine		+	±	+	+
water, effluents of every type but without organic solvents		+	+	+	+
detergents	Ntc	+	±	+	+
butter		±	-	+	±

Testing Method

The chemical resistance of Alkorplan/Alkorflex sheets is tested in accordance with DIN 53393.

This testing method is not the only reference for the chemical resistance of the Alkorplan roofing membranes, since it is dependent on a number of factors, e.g. form (solid, liquid, gaseous), temperature, concentration, thickness, reaction time, etc ...

A mixture of chemical agents may show a higher degree of aggression than each of the components separately.

The evaluation only reflects the functionality and resistance of the sheets, without considering any surface or colour changes.

Chemical Stability

The information contained in the present literature is based on current knowledge at the time of issue, and may be subject to change without notice.