



Durability

Chemical resistance

GRP is resistant against solvents, plasticisers, fuel, mineral oil, diluted acids and alkalis: moreover against the influence of exhaust gases or aggressive industrial atmosphere.

This is only an extract of the substance table – upon request you can get information about further resistances.

Substances (selection, more upon request)	Concentration	Resistance at 20-30 °C
Acetone		○ ○
Ammoniac		● ● ●
Petrol		● ● ●
Grease		● ● ●
Formaldehyde		○ ○
Ocean water		● ● ●
Lactic acid		○ ○
Mineral oil		● ● ●
Sodium Chloride	saturated	● ● ●
Phosphoric acid	10 % aqueous diluted	● ● ●
Turpentine		○ ○
Citric acid		● ● ●

● ● ● resistant ○ ○ conditionally resistant

Further properties

Electrical conductivity	10e -12 S/m
Microbial inertness	certified according to standards VDI 6022
Erosion and emission of particles	certified according to EN 13401

Temperature resistance

PUR rigid foam is characterized by high mechanical strength and good dimensional stability in construction applications for temperature ranges from –40 °C to +80 °C (long-term exposure). A short-term rise in surface temperature is possible, for example, when exposed to direct sunlight.

Organic resistance

PUR rigid foam does not rot, is mould- and decay resistant and physiologically harmless for the applications coming into question. Polyurethane rigid foam reacts chemically neutral.

Thermal expansion behaviour

Length change = expansion coefficient x initial length x temperature change

Example:

Expansion coefficient Ventaflex duct = 0,00005 1/K
 Initial length = 1000 mm
 Temperature change = 20 K
0,00005 1/K x 1000 mm x 20 K = 1 mm

**Expansion 1mm per 1m duct
length at 20 °C temperature
change**