FOAMGLAS® CHEMICAL DURABILITY

FOAMGLAS® cellular glass is composed exclusively of glass, with the exception of a very small amount of carbon, burnt to produce CO_2 or encapsulated in the cell walls.
The glass selected to manufacture FOAMGLAS® cellular glass corresponds to hydrolytic class III according to DIN 12.111 or class 3 according to an ISO test. To qualify the durability of this type of class, it can be mentioned that when tested according to the USP (United States Pharmacopoeia) procedure, the FOAMGLAS® cellular glass is as chemically durable as the glass used for packing pharmaceutical preparations.
To summarize its behavior, its resistance towards acids - except hydrofluoric acid and orthophosphoric acid - is excellent, its resistance against bases (alkali) fair with a few exceptions and its resistance against organics excellent.

The following table provides data on chemical resistance in specific conditions. It is based on a 100% immersion for a period of almost two years at 23 °C.

	LIQUIDS TESTED	RATING
(1)	5% Hydrochloric Acid (HCL)	E
(2)	5% Sulphuric Acid (H_2SO_4)	E
(3)	50% Sulphuric Acid (H_2SO_4)	E
(4)	Conc. Sulphuric Acid (H_2SO_4)²	E
(5)	5% Nitric Acid (HNO_3)	E
(6)	5% Phosphoric Acid (H_3PO_4)	G-P
(7)	Acetic Acid (CH_3COOH)	E
(8)	Hydrofluoric Acid (HF)	S
(9)	Water (H_2O)	E
(10)	Ethyl Alcohol (C_2H_5OH)	E
(11)	Benzene (C_6H_6)	E
(12)	Carbon Tetra Chloride ($C CL_4$)	E
(13)	5% Potassium Chromate ($K_2CR_2O_7$)	G
(14)	5% Ammonium Hydroxide (NH_4OH)	G
(15)	5% Sodium Chloride (NaCL)	G
(16)	5% Sodium Sulfite (Na_2SO_2)	G
(17)	5% Sodium Carbonate (Na_2CO_3)	G
(18)	5% Potassium Hydroxide (KOH)	P
(19)	5% Sodium Hydroxide (NaOH)	P
(20)	50% Sodium Hydroxide (NaOH)	P
(21)	Mersol	G

E = Excellent
G = Good
P = Poor
S = Severe Attack