

TABLE 9

Sample number	Bath Additives	Concentration, mol./l.	Prefiring conditions		Firing		Foamed product			
			Temp. (° C.)	Time (min.)	Temp. (° C.)	Time (min.)	Foaming degree	Specific surface area, g./cm. ²	Color	Surface strength, percent
65	KCl	0.098	650	20	1,050	6	3.0	0.45	White	97
	H ₂ BO ₃	0.970								
66	KCl	0.210	650	30	1,050	6	5.0	0.28	Yellow	97
	ZnCl ₂	0.110								
	K ₂ Cr ₂ O ₇	0.051								
67	H ₂ BO ₃	0.970	650	30	1,050	8	5.1	0.28	Greenish brown.	97
	KCl	0.210								
	CoCl ₂	0.380								
	K ₂ Cr ₂ O ₇	0.034								
68	H ₂ BO ₃	0.970	650	30	1,050	8	5.7	0.23	Reddish brown.	97
	KNO ₃	0.136								
	FeCl ₃	0.123								
	Zn(CH ₃ COO) ₂	0.162								

EXAMPLE 8

Dried silica gel having a particle size of 6 to 10 mesh and a specific surface area of 796 m²/g was fired at 650°C for 60 minutes to produce a prefired product whose ignition loss was 0.5 to 2.0 percent by weight, then the temperature was raised to 1200°C in the period shown in Table 10 below, and the prefired product was heated at the temperature for 4 minutes for firing, whereby a foamed product having properties shown in Table 10 below was obtained.

TABLE 10

Sample No.	Time required for raising prefiring Temp. to firing Temp. (min.)	Foaming degree	Surface strength (%)
69	5	4.0	96
70	15	4.0	93
71	30	3.8	84

What we claim is:

1. A method for manufacturing foamed product of silica from silica gel which comprises prefiring silica gel at a temperature ranging from 500 to 900°C so as to obtain a prefired product which can be ignited with a loss of not more than 5 % by weight, the silica gel having a specific surface area of at least 500 m²/g and being of a size not passing through an 80-mesh sieve and substantially free of adsorption water, and thereafter firing the prefired product at a temperature ranging from 1000 to 1450°C to effect foaming.
2. The method according to claim 1, in which said silica gel has a specific surface area of 600 to 900 m²/g.
3. The method according to claim 1, in which said silica gel passes through a 5-mesh sieve but do not pass through a 24-mesh sieve.

4. The method according to claim 1, in which silica gel is prefired at a temperature ranging from 550 to 750°C.

5. The method according to claim 1, in which said prefired product shows ignition loss of 0.5 to 2.5 weight percent.

6. The method according to claim 1, in which said prefired product is fired at a temperature ranging from 1100 to 1300°C.

7. The method according to claim 1, in which said prefiring temperature is raised to said firing temperature within 20 minutes.

8. The method according to claim 7, in which said period for raising the prefired temperature to fired temperature is within 10 minutes.

9. The method according to claim 1, in which said silica gel is impregnated with a coloring material to produce colored foamed product.

10. The method according to claim 9, in which said coloring material is at least one water-soluble salts of a metal selected from the group consisting of iron, cobalt, copper, zinc, chromium, manganese, nickel and lead.

11. The method according to claim 1, in which said silica gel is impregnated with a flux and pre-fired at 450 to 800°C and then fired at 900 to 1450°C.

12. The method according to claim 11, in which said flux is at least one species selected from the group consisting of a water-soluble alkali metal salt and a water-soluble boron compound.

13. The method according to claim 11, in which said firing temperature is in the range of 1000 to 1150°C.

14. A granular foamed product of silica which is produced from silica gel by the method of claim 1 and comprises a vitrified surface and a great number of open or semi-closed pores defined by vitrified partitions.

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