

AGC CERAMICS CO., LTD.

Asahi light caster for gunning

Jan, 2012

Product		LC-13G	LC-12NG	LC-11G	LC-10G	LC-10NG
Max service temperature (°C)		1400	1300	1200	1100	1000
Installation requirement (t/m ³)		1.25	1.35	1.05	0.90	0.95
Installation requirement (t/m ³ , at troweling)		1.05	1.25	1.00	0.85	0.85
Water additions (wt%)		Nozzle mixing	Nozzle mixing	Nozzle mixing	Nozzle mixing	Nozzle mixing
Chemical composition (%)	SiO ₂	42	42	39	42	41
	Al ₂ O ₃	42	39	40	32	16
Bulk density	110°C × 24hrs.	1.35	1.35	1.10	0.95	1.00
	()Tempx 3hrs.	1.25 (1300)	1.20 (1200)	1.00 (1000)	0.85 (1000)	0.96 (900)
Cold crushing strength (MPa)	110°C × 24hrs.	5 (1.5)	5 (1.5)	8 (2)	2 (0.8)	2 (1.0)
	900°C × 3hrs.	4 (1.0)	3 (1.0)	5 (1.5)	2 (0.5)	1 (0.6)
Bending strength (MPa)	1000°C × 3hrs.			5 (1.5)	2 (0.5)	
	1200°C × 3hrs.	5 (1.2)	3 (1.0)			
Permanent linear change (%)	()Temp.x 3hrs.	-1.0 (1200)	-1.2 (1200)	-1.0 (1000)	-1.3 (1000)	-1.1 (900)
Thermal conductivity (W/mK)	at 100°C	0.35	0.45	0.30	0.17	0.17
	at 400°C	0.45	0.45	0.35	0.21	0.21
	at 1000°C	0.50	0.55	0.40	0.30	0.30
Standard package quantity(kg)		20	20	20	20	20
Features		General purpose	General purpose	General purpose	General purpose	General purpose
Typical applications		Types of kilns	Types of kilns	Heating furnace	Types of kilns	Types of kilns

※The data shown here is a representative value, and no hallmark value.

※The data shown here is from the sample which is prepared by casting.

※As for the Asahi light caster for gunning method, the troweling method can also be used. The installation requirements of these two methods are different.

※When the troweling method is used, the water additions(wt%) of products is shown as follows:

LC-13G 30~40 LC-12NG 28~38 LC-11G 35~45 LC-10G 50~70 LC-10NG 40~60