

Calcium Aluminate Cement



Application:

In high temperature industries, refractory cement for sale is an important and popular product. Because it has wide applications in manufacturing monolithic refractory products and directly using in kilns.

CA-50 series Technical Data:

Item		A600	A700	A900
SiO ₂ , %	≤	7.8	7.5	5.5
Al ₂ O ₃ , %	≥	50.0	51.0	53.5
Fe ₂ O ₃ , %	≤	2.5	2.5	2.5
R ₂ O, %	≤	0.4	0.4	0.4
S, %	≤	0.1	0.1	0.1
Cl, %	≤	0.1	0.1	0.1
325M Residue on Sieve, %	≤	15	12	8
S, m ² /kg	≥	300	320	350
Initial Setting Time, min	≥	45	60	90
Final Setting Time, h	≤	6	6	6
Flexural Strength, Mpa	1d	≥ 6.0	≥ 6.5	≥ 8.0
	3d	≥ 7.0	≥ 7.5	≥ 10.0
Compressive Strength, Mpa	1d	≥ 45	≥ 55	≥ 72
	3d	≥ 55	≥ 65	≥ 82

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CA-70 Technical Data:

Item	CA70	
Properties Determined according to GB201-2000		
SiO ₂ , %	≤0.5	
Al ₂ O ₃ , %	68.5-70.5	
Fe ₂ O ₃ , %	≤0.2	
CaO, %	28.5-30.5	
MgO, %	≤0.4	
R ₂ O, %	≤0.4	
Fineness	D50, μm	11-14
	-45μm, %	≤8.0
Setting Time, min	Initial Setting, IS	120-180
	Final Setting, FS	150-240
Flexural Strength, Mpa	1d	7.5-10.0
	3d	10.0-12.0
Compressive Strength, Mpa	1d	40-50
	3d	45-55
Cement Properties in Testing Castables		
Setting Time, min	20°C	60-90
	35°C	30-50
Vibration Flow, mm (20°C)	Initial Flow	265-275
	10min	255-265
	30min	235-245
	60min	230-240
Flexural Strength, Mpa	20°C×24h	4.5-5.5
	110°C×24h	10.0-11.5
	1100°C×4h	12.0-14.0
Compressive Strength, Mpa	20°C×24h	35-45
	110°C×24h	85-95
	1100°C×4h	100-120
Linear Change, %	1100°C×4h	≤-0.25

CA-80 Technical Data:

Item	CA80	
Properties Determined according to GB201-2000		
SiO ₂ , %	≤0.5	
Al ₂ O ₃ , %	78.0-81.0	
Fe ₂ O ₃ , %	≤0.2	
CaO, %	17.5-20.5	
MgO, %	≤0.4	
R ₂ O, %	≤0.4	
Fineness	D50, μm	5-8
	-45μm, %	≤5.0
Setting Time, min	Initial Setting, IS	30-90
	Final Setting, FS	90-180
Flexural Strength, Mpa	1d	5.0-7.5
	3d	6.0-8.5
Compressive Strength, Mpa	1d	30-40
	3d	40-50
Cement Properties in Testing Castables		
Setting Time, min	20°C	90-120
	35°C	40-60
Vibration Flow, mm (20°C)	Initial Flow	255-265
	10min	250-260
	30min	240-250
	60min	235-245
Flexural Strength, Mpa	20°C×24h	3.0-4.0
	110°C×24h	8.0-9.0
	1100°C×4h	11.0-13.0
Compressive Strength, Mpa	20°C×24h	25-35
	110°C×24h	60-70
	1100°C×4h	100-120
Linear Change, %	1100°C×4h	≤-0.15