

Refractory cement



- Refractoriness : 1600-1700°C
- Initial setting time ≥ 30 min
- Specific surface area $\geq 300\text{m}^2/\text{kg}$
- 24 - hour compressive strength $\geq 40\text{MPa}$

Application:

Fast hardening, high early strength, short construction cycle. Used for building and repairing metallurgical, glass and ceramic kilns.

CA50 Technical Data:

Item/Grade		A600	A700	A900
Chemical Composition	$\omega(\text{SiO}_2) \leq /\%$	7.8	7.5	5.5
	$\omega(\text{Al}_2\text{O}_3) \geq /\%$	50.0	51.0	53.5
	$\omega(\text{Fe}_2\text{O}_3) \leq /\%$	2.5	2.5	2.5
	$\omega(\text{R}_2\text{O}) \leq /\%$	0.4	0.4	0.4
	$\omega(\text{S}) \leq /\%$	0.1	0.1	0.1
	$\omega(\text{Cl}) \leq /\%$	0.1	0.1	0.1
$325\text{M} \leq /\%$		15	12	8
Specific Surface Areas $\geq / (\text{m}^2/\text{kg})$		300	320	350
Setting Time	Initial Setting Time $\geq / (\text{min})$	45	60	90
	Final Setting Time $\leq / (\text{min})$	6	6	6
Flexural Strength \geq / Mpa	6h	/	/	/
	24h	6.0	6.5	8.0
	72h	7.0	7.5	10.0
Compressive Strength \geq / Mpa	6h	/	/	/
	24h	45	55	72
	72h	55	65	82

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CA70 Technical Data:

Item/Grade		CA70	CA70W	CA70S	CA71
Chemical Composition	$\omega(\text{SiO}_2) \leq /\%$	0.5	0.5	0.5	0.5
	$\omega(\text{Al}_2\text{O}_3) \geq /\%$	68.5-70.5	68.5-70.5	68.5-70.5	69.5-71.5
	$\omega(\text{Fe}_2\text{O}_3) \leq /\%$	0.2	0.2	0.2	0.2
	$\omega(\text{CaO})/\%$	28.5-30.5	28.5-30.5	28.5-30.5	27.5-29.5
	$\omega(\text{MgO}) \leq /\%$	0.4	0.4	0.4	0.4
	$\omega(\text{R}_2\text{O}) \leq /\%$	0.4	0.4	0.4	0.4
Fineness	d50/ μm	11-4	8-11	6-9	10-13
	-45 $\mu\text{m} \leq /\%$	8.0	5.0	5.0	8.0
Setting Time	Initial Setting Time (min)	120-180	30-90	180-240	150-210
	Final Setting Time (min)	150-240	90-180	240-330	210-300
Strength (ISO)	Flexural Strength/Mpa	24h	7.5-10.0	8.0-10.5	8.5-11.0
		72h	10.0-12.0	10.5-12.5	11.0-12.5
	Compressive Strength/Mpa	24h	40-50	45-55	50-60
		72h	45-55	50-60	55-65

CA80 Technical Data:

Item/Grade		CA80	CA80S
Chemical Composition	$\omega(\text{SiO}_2) \leq /\%$	0.5	0.5
	$\omega(\text{Al}_2\text{O}_3) \geq /\%$	78.0-81.0	78.0-81.0
	$\omega(\text{Fe}_2\text{O}_3) \leq /\%$	0.2	0.2
	$\omega(\text{CaO})/\%$	17.5-20.5	17.5-20.5
	$\omega(\text{MgO}) \leq /\%$	0.4	0.4
	$\omega(\text{R}_2\text{O}) \leq /\%$	0.4	0.4
Fineness	d50/ μm	5-8	5-8
	-45 $\mu\text{m} \leq /\%$	5.0	5.0
Setting Time	Initial Setting Time (min)	30-90	90-150
	Final Setting Time (min)	90-180	270-360
Strength (ISO)	Flexural Strength/Mpa	24h	5.0-7.5
		72h	6.0-8.5
	Compressive strength/Mpa	24h	30-40
		72h	40-50