PYROCAST FS76 AL

PRECAST HIGH STRENGTH REFRACTORY

Pyrocast FS76 AL is a high strength, low cement, fused silica based castable with excellent thermal shock resistance. It is non-wetting to aluminium and zinc alloys, which improves molten metal transfer troughs and filter bowls. It is also used for channel furnace lining inductors holding zinc and Galvalume® alloys, and for other thermal cycling applications with temperatures below 1370°C (2500°F).

COMPOSITION (PRECAST BLEND)

Material	Approximate Weight
SiO_2	76.3%
Al_2O_3	20.3%
CaO	2.4%

BENEFITS

- Dimensionally stable
- Easily cleaned
- Extremely durable
- Non-wetting
- Smooth cast surface
- Thermal shock resistant

APPLICATIONS

- Troughs
- Filter bowls

STORAGE

Store in a dry location to avoid moisture absorption.

HEALTH AND SAFETY

Prior to use, refer to the product safety data sheet for proper handling and required personal protective equipment.

Pyrotek

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Property	Temperature	Value
Density–kg/m³ (lb/ft³)	110°C (230°F)	2020 (126)
	538°C (1000°F)	2000 (125)
	815°C (1500°F)	1980 (124)
	1093°C (2000°F)	1960 (122)
Linear Expansion	538°C (1000°F)	–0.1%
	815°C (1500°F)	–0.2%
Modulus of Rupture–MPa (psi)	110°C (230°F)	10.0 (1450)
	538°C (1000°F)	11.0 (1600)
	815°C (1500°F)	9.6 (1390)
	1093°C (2000°F)	8.8 (1270)
Cold Crushing Strength–MPa (psi)	110°C (230°F)	46.5 (6750)
	538°C (1000°F)	55.7 (8080)
	815°C (1500°F)	56.9 (8250)
	1093°C (2000°F)	47.1 (6840)
Hot Modulus of Rupture–MPa (psi)	815°C (1500°F)	23.8 (3450)
Abrasion Resistance–cm³ (in³)	110°C (230°F)	10–12 (0.61–0.73)
	815°C (1500°F)	8–10 (0.49–0.61)
Thermal Conductivity–W/m·K (BTU·in/ft²·hr·°F)	110°C (230°F)	1.2 (8.0)
	427°C (800°F)	1.4 (9.5)
	538°C (1000°F)	1.4 (9.9)
	704°C (1300°F)	1.6 (10.8)
	815°C (1500°F)	1.7 (11.7)
	927°C (1700°F)	1.8 (12.8)
	1093°C (2000°F)	2.1 (14.4)
Maximum Grain Size–mm (in)	4.75 (0.19)	
Maximum Use Temperature	1370°C (2500°F)	
Coefficient of Thermal Expansion	1.1 x 10^{-6}/°C (6.0 x 10^{-7}/ °F)	

Note: The physical and chemical properties listed represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice.

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Product Type: 114, 124, 150, 173, 183
Commodity Code: 02109