KALAKAST AR® ADTECH®

HarbisonWalker International™

Product Data

9/08: 2245

Description: 60% Alumina Casting Mix Designed for Alkali Resistance	
Features:	• Exceptional resistance to alkali attack. • Better abrasion resistance than typical 60% alumina-fired brick, castables, and phosphate-bonded plastics after curing. • High hot strengths at elevated temperatures. • Designed to replace brick and plastic where joints are undesirable.
Uses:	• Aluminum reverberation furnaces, roofs, and upper sidewalls. • Rotary dross furnaces, jambs, lintels, and precast shapes. • Incinerators.

Chemical Analysis: Approximate (Calcined Basis)	
Silica (SiO_2)	35.5%
Alumina (Al_2O_3)	58.3%
Iron Oxide (Fe_2O_3)	1.1%
Titania (TiO_2)	2.4%
Lime (CaO)	2.4%
Magnesia (MgO)	0.1%
Alkalies (Na_2O+K_2O)	0.2%

Physical Data (Typical)	
Maximum Service Temperature	3100°F (1705°C)
Material Required	146 lb/ft^3 (2.33 g/cm^3)
Bulk Density	lb/ft^3 (g/cm^3)
After 230°F (110°C)	151 (2.42)
Modulus of Rupture	lb/in.^{2} (MPa)
After 230°F (110°C)	1,900 (13.1)
After 1500°F (816°C)	2,300 (15.9)
Cold Crushing Strength	lb/in.^{2} (MPa)
After 230°F (110°C)	16,000 (110.3)
After 1500°F (816°C)	12,000 (82.8)
Permanent Linear Change	
After 230°F (110°C)	Negligible
After 1500°F (816°C)	-0.2%
After 3000°F (1650°C)	+0.5%

Note: The data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.

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Mixing and Using Information (Water calculated at 8.337 lb/gallon)	55 lb bag	1000 lb bag	1500 lb bag
Water Required—Vibration Casting (Weight 6.6%)			
Pounds	3.6	66.0	99.0
Gallons	0.4	7.9	11.9
Liters	1.6	29.9	44.9

For detailed mixing and using instructions, contact your HWI representative or visit www.thinkHWI.com.

Heatup/Dryout Schedule

See HWI Dryout Schedule 1—Standard Castables and Gunning Castables.

WARNING: If proper procedures for preparation, application, and heatup of this material are not observed, steam spalling during heatup may occur.

Installation Guidelines

See HWI Installation Guidelines LCC-1—Low Cement Castables—Standard.

Shelf Life (Under Proper Storage Conditions)	270 days
Shelf Life (In Form, Fill & Seal Packaging)	365 days