



# Plibrico Company, LLC

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# Technical Data Sheet Plicast Al-Rezist 65 KK

Product # 3276

Available Internationally As:

Plico Castable Al-Rezist 65 KK

### Product Description:

A 65% alumina, mullite based castable with excellent aluminum resistance at elevated temperatures with an advanced, multi-component additive system.

**Standard Packaging:** 55 # / 25 kg Bag

**Shelf Life:** 6 months

**Service Limit:** 2800 °F 1540 °C

**Contact Limit:** 1800 °F 982 °C

**Bulk Density - In Service:** 160 pcf 2563 kg/m<sup>3</sup>

**Bulk Density - To Place:** 160 pcf 2563 kg/m<sup>3</sup>

**Minimum Time To Firing:** 16 hr

**Abrasion Loss after 1500°F / 815°C**  
 per ASTM C704

N/A cc

Chemistry (calcined) %					
Al <sub>2</sub> O <sub>3</sub>	64.9	Alk	0.1	MgO	
SiO <sub>2</sub>	18.8	TiO <sub>2</sub>	2.0	ZrO <sub>2</sub>	
CaO	3.9	P <sub>2</sub> O <sub>5</sub>		Other	7.3
Fe <sub>2</sub> O <sub>3</sub>	0.9	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min			
	max			
Casting	min	6.0	1.6	1.5
	max	6.7	1.8	1.7
Pumping	min	6.5	1.7	1.6
	max	7.2	1.9	1.8

**Coefficient of Thermal Expansion (reversible):**

3.4 x 10<sup>-6</sup> in/in/°F / 6.1 x 10<sup>-6</sup> mm/mm/°C

Thermal Conductivity	btu*in/hr*ft <sup>2</sup> *°F	W/m°C
500°F / 260°C	9.7	1.40
1000°F / 540°C	11.3	1.63
1500°F / 815°C	11.6	1.67
2000°F / 1090°C	11.9	1.71

Temperature		Linear Change% per ASTM C113	CCS per ASTM C133		Cold MOR per ASTM C133		Hot MOR per ASTM C583	
°F	°C		psi	MPa	psi	MPa	psi	MPa
230	110	0.0			2641	18.2		
1000	540							
1500	820	-0.3			1685	11.6	2000	13.8
1800	980						1300	9.0
2000	1090						1000	6.9

Other Data:

Release Date: 1 Jun 2021

Heat Up Guide: Schedule AT AS or AT AS Linear

ASTM Class: C 401 Class F  
 Regular Castable

Refractory material should be stored in a cool, dry environment.

**Note:** All data are averaged results of ASTM tests (where applicable) on laboratory specimens. Reasonable variations in data can be expected. Data is not to be used for specification purposes. Product data is periodically updated to reflect product, raw material, process and/or testing changes. Please consult your Plibrico representative to make sure you have the most current data.