



# Plibrico Company, LLC

1935 Techny Road - Unit 16  
 Northbrook, IL 60062  
 (312) 337-9000  
 www.plibrico.com

# Technical Data Sheet Pli-Shot Al-Shield GHC 7 KK

Product # 15257

Available Internationally As: Plicocrete Shot A-S GHC 7 KK

### Product Description:

A 70% alumina, mullite based, aluminum resistant shotcrete castable.

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

**Shelf Life:** 6 months

**Service Limit:** 3000 °F 1650 °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>	70.1	Alk	0.2	MgO	0.1
SiO <sub>2</sub>	18.1	TiO <sub>2</sub>	1.4	ZrO <sub>2</sub>	
CaO	3.2	P <sub>2</sub> O <sub>5</sub>		Other	5.6
Fe <sub>2</sub> O <sub>3</sub>	1.3	SiC			

Water Range Per Standard Package		%	Quarts	Liters
Vib Casting	min			
	max			
Casting	min			
	max			
Pumping	min	6.4	1.7	1.6
	max	7.6	2.0	1.9

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

3.7 x 10<sup>-6</sup> in/in/°F / 6.7 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	10.7	1.5
1000°F / 540°C	11.3	1.6
1500°F / 815°C	12.0	1.7
2000°F / 1090°C	12.6	1.8

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	6500	45.0	1400	9.7		
1500	820	-0.2	5500	38.0	1600	11.0	2000	13.8
1800	980	-0.4					2200	15.2

Other Data:

Release Date: 1 Aug 2019

Heat Up Guide: Schedule AT AS or AT AS

ASTM Class: C 401 Class E 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.