



ARTECH TECHNOLOGIES INC  
*Superior Abrasion Resistant Materials*

# ACTCHEM<sup>®</sup> 45

## PRODUCT DATA

**Actchem<sup>®</sup> 45** is a single component, medium-weight, air setting castable with exceptional abrasion resistance, cold crushing strength and chemical resistance which can be hand packed or rammed in thin lining applications. The formulation is based on the original Actchem, using the same proven binder system. The binder system provides flexible water additions, early strength, and low abrasion loss at low temperatures.

**Actchem<sup>®</sup> 45** has a unique bonding system allows working times of 60-90 minutes. Enhanced workability and non-slumping features achieve greater installation productivity. Excellent adhesion properties make the product ideal for patch repairs.

**Actchem<sup>®</sup> 45** can be gunned with low rebound losses using standard gunning equipment and needle valve water control. Lining thicknesses of up to 5 inches have been successfully achieved.

**Actchem<sup>®</sup> 45** can be used in a wide range of applications, but typical areas of use include fan housings, burner throats in boilers, chutes and other severe abrasion applications where greater insulation is desired.

<b>Service Temperature</b>	2300°F	<b>Water Required</b>	6 to 7%
<b>Abrasion Loss (ASTM C-704)</b>	≤ 6 cc	<b>Material Required</b>	147 lb/ft <sup>3</sup>

### Physical Properties

Test Temperature (°F)	Bulk Density (pcf)	Cold Crushing Strength (psi)	Modulus of Rupture (psi)	Permanent Linear Change (%)
Ambient	147	5,000	1,000	Nil
230	147	> 10,000	2,000	0.0 to -0.2
660	142	> 10,000	3,000	-0.1 to -0.2
1500	142	> 15,000	3,000	-0.2 to -0.3

### Chemical Analysis

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	P <sub>2</sub> O <sub>5</sub>	Alkalies
46.2	46.4	0.7	1.2	3.2	1.4	0.9

**Packaging:** 50 lb. bags at 72 per pallet

The data shown represents typical results obtained by testing using ASTM or other acceptable procedures as required. They are subject to normal manufacturing variations and can not be used for specification purposes. Artech Technologies, Inc. assumes no liability for the use of this data and provides no warranty expressed or otherwise for its accuracy.