PRODUCT BULLETIN

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ALLIED MINERAL PRODUCTS, INC.

COIL CAST 97A

General Information

COIL CAST 97A is a high alumina, conventional cement level, alumina castable refractory designed for use in severe service conditions. COIL CAST 97A can be pour cast, spade cast or lightly vibrated. Excessive vibration should not be used. COIL CAST 97A offers the following benefits and features:

> Outstanding corrosion resistance to scale
> Low silica and iron level
> Excellent resistance to thermal shock
> Self leveling

Technical Data

Chemical Analysis
(Major Components)

Al_2O_3	96.6%
CaO	3.3%
SiO_2	0.1%

Material Required	3.03 g/cm^3 (189 pcf)
Grain Size.	1 mm (16 mesh) and finer
Maximum Use Temperature	1650^{o}C (3000°F)

Packaged in 25 kg (55-lb.) multi-wall paper bags. Also available in bulk packaging. Storage beyond 24 months is not recommended. Store in a dry location to avoid moisture pickup.

Hydraulic Set

Water Required:	8.5-9.4% (2.10-2.35 liters/25kg or 4.5-5.0 pints/55 lbs)
Working Time:	up to 90 minutes
Initial Set:	1 – 6 hours
Final Set:	4 – 9 hours

Allied Mineral Products, Inc. supplies a complete line of monolithic refractories for the metals industry. For more information or a complete evaluation of your refractory requirements, please contact your local Allied representative.

Warning: Contains aluminum oxide, aluminosilicate, cement and silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica inhaled in the form of quartz or cristobalite carcinogenic to humans. Refer to Material Safety Data Sheet for additional information and disposal instructions. Avoid breathing dust. Wear NIOSH approved respirator during installation, removal, and disposal of product to prevent inhalation of dust. Avoid contact with skin and eyes. Cement powder or freshly mixed castable may cause eye and skin irritation. In case of eye contact, flush immediately and repeatedly with water and consult a physician. Steam spalling, which can lead to personal injury, may result from improper drying and firing procedures. For safest use and optimum performance, proper practices must be followed.

(CC97)
Revised 1/14/13

Laboratory Test Bar Data

Coil Cast 97A

Permanent Linear Change	**%**
After heating to:	
110°C (230°F)	--
815°C (1500°F)	-.01
1095°C (2000°F)	0.32
1315°C (2400°F)	0.19
1480°C (2700°F)	0.91

Density	**pcf**	**g/cm_3**	**kg/m^3**
After heating to:			
110°C (230°F)	189	3.03	3030
815°C (1500°F)	178	2.85	2850
1095°C (2000°F)	178	2.85	2850
1315°C (2400°F)	180	2.89	2890
1480°C (2700°F)	174	2.79	2790

Modulus Of Rupture	**psi**	**MPa**	**kg/cm^2**
After heating to:			
110°C (230°F)	3350	23.1	236
815°C (1500°F)	2450	16.9	172
1095°C (2000°F)	2650	18.3	187
1315°C (2400°F)	3390	23.4	239
1480°C (2700°F)	4640	32.0	326

Cold Crushing Strength	**psi**	**MPa**	**kg/cm^2**
After heating to:			
110°C (230°F)	25500	175.7	1790
815°C (1500°F)	24700	170.2	1740
1095°C (2000°F)	20000	138.0	1410
1315°C (2400°F)	22200	153.1	1560
1480°C (2700°F)	27400	188.8	1930

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