

PRODUCT BULLETIN

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**ALLIED
MINERAL**
PRODUCTS, INC.

COIL CAST FS

General Information

COIL CAST FS is a fused silica, fine grained “modern” conventional cement level castable refractory designed for use in severe thermal cycling conditions. COIL CAST FS can be pour cast, spade cast or lightly vibrated. Excessive vibration should not be used. COIL CAST FS offers the following benefits and features:

- > Outstanding corrosion resistance to scale
- > Exceptional flow in tight spaces

Technical Data

Chemical Analysis

(Major Components)

SiO ₂	68.7%
Al ₂ O ₃	27.5%
CaO	3.4%

Material Required	2.03 g/cm ³ (127 lbs./ft ³)
Grain Size	2 mm (10 mesh) and finer
Maximum Use Temperature	1316°C (2400°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:	7.8-8.8% (2.05-2.25 liters/25kg or 4.3-4.8 pints/55 lbs)
Working Time:	up to 1.5 hours
Initial Set:	2 – 6 hours
Final Set:	3 – 9 hours

Matrix Refractories, 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.

(CCFS)
12/20/13

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THE INFORMATION STATED IS BASED ON THE BEST LABORATORY AND LITERATURE DATA AND IS NOT A WARRANTY OR A GUARANTEE, NOR A VIOLATION OF ANY PATENT. IT IS PRESENTED FOR CONSIDERATION AND VERIFICATION ONLY, AND IS NOT TO BE USED FOR SPECIFICATION PURPOSES.

Laboratory Test Bar Data

COIL CAST FS

<u>Permanent Linear Change</u>	<u>%</u>
After heating to:	
110°C (230°F)	--
760°C (1400°F)	-.13
982°C (1800°F)	-.19
1204°C (2200°F)	-.26
1315°C (2400°F)	-.42

<u>Density</u>	<u>pcf</u>	<u>g/cm₃</u>	<u>kg/m³</u>
After heating to:			
110°C (230°F)	129	2.06	2060
760°C (1400°F)	125	2.00	2000
982°C (1800°F)	126	2.01	2010
1204°C (2200°F)	124	1.99	1990
1315°C (2400°F)	126	2.01	2010

<u>Modulus Of Rupture</u>	<u>psi</u>	<u>MPa</u>	<u>kg/cm²</u>
After heating to:			
110°C (230°F)	1688	11.6	119
760°C (1400°F)	1261	8.7	89
982°C (1800°F)	1605	11.1	113
1204°C (2200°F)	1448	10.0	102
1315°C (2400°F)	1736	12.0	122



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