

Product Data

9/10: 5616

Description: Wet, High-Alumina, Phosphate-Bonded Mortar

- Features:
- Excellent smooth working characteristics.
 - Good resistance to slag attack.

Chemical Analysis: Approximate (Calcined Basis)

Silica (SiO ₂)	7.2%
Alumina (Al ₂ O ₃)	81.6%
Iron Oxide (Fe ₂ O ₃)	1.5%
Titania (TiO ₂)	2.9%
Lime (CaO)	0.1%
Magnesia (MgO)	0.1%
Alkalies (Na ₂ O+K ₂ O)	0.1%
Phosphorus Pentoxide (P ₂ O ₅)	6.5%

Physical Data (Typical)

Maximum Service Temperature	3000°F (1650°C)
Material Required to Lay 1,000 9×4½×2½ inch (229×114×63 mm) Brick	lb (kg)
Dipping Consistency	450 to 500 (205 to 225 kg)
Modulus of Rupture	lb/in. ² (MPa)
On DV-38® Brick with Ends Bonded Together Using Mortar in Troweling Consistency	
After 220°F (105°C)	800 to 1,800 (5.5 to 12.4)
After 1500°F (815°C)	250 to 850 (1.7 to 5.9)

Refractoriness Test

3000°F (1650°C) Test Temperature	No softening or flowing
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Particle Size

Maximum Grain Size 20 Mesh (Tyler)	Less than 0.5%
Maximum Grain Size 35 Mesh (Tyler)	Less than 5.0%

Water Retention

Minimum of 10 minutes

Note: The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.

Mixing and Using Information

Per 55 lb Pail

Material is supplied ready to use and can be field-adjusted as required.

Water Required—Thin Trowel

Gallons	0.0625
Liters	0.25

Water Required—Dipping

Gallons	0.625
Liters	2.3

Product Data

For detailed mixing and using instructions, contact your HWI representative or visit www.thinkHWI.com.

Installation Guidelines

See HWI Installation Guidelines M-1—Wet Mortars—Ready to Use.

Note: On occasion an odor (rotten egg) can be detected upon opening the lids to the mortar bucket. This is caused by the natural reaction of the phos binder with tramp iron in the refractory grain. This odor is normal and has no adverse effect on the product's quality.

Shelf Life (Under Proper Storage Conditions)

180 days
