

CE-221
11/13 Supersedes 07/01

GUNITE MIX SDX[®]

DESCRIPTION

Gunite Mix SDX is a single component, chemically hardening, 100% potassium silicate, inorganic, acid-resistant cement designed for application strictly by the dry gunite method of installation. Gunite Mix SDX will resist all strengths of acids except acid fluorides. SDX does not require an acid wash. There are no Portland cement, calcium aluminate or other hydraulic setting binders in SDX. SDX evolves no gases or objectionable odors during application or curing period, and is installed with an “as gunned” finish - no trimming or trowel finishing is required resulting in labor savings. **Consult Corrosion Engineering specifications [CES-321](#) and [CES-329](#) for complete installation details.**

AREAS OF USE

Gunite Mix SDX is recommended for use in acidic environments found in chimneys, breeching ducts, stacks, process vessels, sulfuric acid towers, pollution control equipment, and corrosive ash hopper linings. In certain applications before guniting, it may be desirable to first apply a chemically resistant membrane such as PACMASTIC[®] 325 or TUFCEM[®] II Membrane to the substrate (steel or concrete) and also to coat the anchors with the same. This affords further chemical protection to the substrate against possible cracking which can occur in monolithic linings.

OUTSTANDING FEATURES

- 100% Potassium Silicate-potassium silicate cement technology has proven superiority of performance over sodium silicate cements particularly in acid resistant brick flue liner construction of chimneys serving fossil fuel fired Power Generating Plants.
- Single Component-requires only the addition of potable water at the nozzle of the gunite equipment.
- Contains no sodium, calcium or fluoride-based components, which can cause sulfation-hydration reactions or the release of fluorides which can lead to the formulation of HF acid (hydrofluoric acid) and resulting severe chemical corrosion.
- Low Absorption - -as defined by ASTM C-413, Gunite Mix SDX exhibits typical absorption of 2.9%, a value much lower than competitive products.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	GUNITE MIX SDX
Color	Off white
Wet Density (ASTM C-138)	138 lbs/ cu ft (as gunned)
Compressive Strength (ASTM C-579) (7 days)	>1,800 psi (12.4 MPa)
Tensile Strength (ASTM C-307)	>380 psi (2.6 MPa)
Flexural Strength (ASTM C-580)	>650 psi (4.5 MPa)
Toluene Absorption, (ASTM C-413)	2.9 %
Linear Shrinkage, (ASTM C-531)	0.005 in./in. unrestrained
Coefficient of Thermal Expansion (75°F-210°F) (ASTM C-531)	7.0 x 10 ⁻⁶ in/in./°F
Modulus of Elasticity (ASTM C-580)	1.57 x 10 ⁶ psi
Maximum Service Temperature	1650°F

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	MIX RATIO and COVERAGE
Gunite Mix SDX	19576	55 lb bag	11.5 lbs of SDX are required to shoot 1 square foot at 1" thickness. This figure does not make allowance for rebound, which will vary with the orientation of the substrate.

SAFETY PRECAUTIONS / DISCLAIMER

Mixes and applications of this product present a number of hazards. Read and follow the hazard information, precautions and first aid directions on the individual product labels and [material safety data sheets](#) before using. While all statements, technical information, and recommendations contained herein are based on information our company believes to be reliable, nothing contained herein shall constitute any warranty, express or implied, with respect to the products and/or services described herein and any such warranties are expressly disclaimed. We recommend that the prospective purchaser or user independently determine the suitability of our product(s) for their intended use. No statement, information or recommendation with respect to our products, whether contained herein or otherwise communicated, shall be legally binding upon us unless expressly set forth in a written agreement between us and the purchaser/user.



Corrosion Engineering | 300 Stevens Drive, Suite 310, Lester, PA 19113
 +1-610-833-4001 Phone | +1-610-833-3040 Fax | corrosion-engineering.com