ErgonArmor
TECHNICAL COATING SOLUTIONS™

PRODUCT INFORMATION

CE-254
10/18 Supersedes 03/14

ASPLIT™ PHENOLIC MORTAR

CN Carbon & Special Grades

DESCRIPTION

ASPLIT Phenolic Mortar is a two-component, resin based, bonding mortar used in chemically resistant masonry construction where the corrosion and temperature resistance of a phenolic based mortar is required. Two fillers – CN Carbon or Special grade are available, depending on the chemical service. For low temperature applications, F/P Mortar accelerator can be added to either grade of mortar to improve work life and set time properties. Consult Corrosion Engineering specification CES-358 for complete installation details.

AREAS OF USE

ASPLIT Phenolic Mortars are suitable for setting and joining chemically resistant brick and tile linings in the construction of corrosion resistant floors, trenches, sumps, sewers, pickling tanks, process vessels and reactor equipment. Use ASPLIT CN Phenolic Carbon Mortar where the presence of fluorides may be expected.

ASPLIT Phenolic Special Mortar has a proven track record in the lining of both wet and dry alum digesters and mix tanks, where conventional phenolic mortars or silicate based mortars have not performed.

OUTSTANDING FEATURES

- Excellent chemical resistance to acids, alkalis, solvents and low concentrations of oxidizing chemicals.
- Chemical resistant to exposures of concentrated (93-98%) sulfuric acid.
- Excellent physical properties.
- Cured CN Carbon grade mortar displays conductive properties, while cured Special Mortar displays nonconductive properties which would prevent a galvanic cell reaction if placed in contact with a lead liner. ASPLIT CN Carbon has also been used for prestressed vessel linings. Consult Ergon for this application.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	ASPLIT CN Mortar	ASPLIT SPECIAL Mortar
Color	Black	Sand
Density (ASTM C138)	92 lbs/cf (1474 kg/m^3)	112 lbs/cf (1794 kg/m^3)
Work life / Set time @ 70°F (ASTM C308)	20-40 mins / 4-6 hours	25-40 mins / 1.5-3.0 hours
Compressive strength (ASTM C579)	>8000 psi (55 MPa)	>5,750 psi (40 MPa)
Tensile strength (ASTM C307)	>1,000 psi (6.9 MPa)	>550 psi (3.8 MPa)
Flexural strength (ASTM C453)	>1,800 psi (12.4 MPa)	>1,000 psi (6.9 MPa)
Water absorption (ASTM C413)	<0.9%	<0.9%
Coefficient of thermal expansion	9.3 x 10^{-6} in/in/°F	12 x 10^{-6} in/in/°F
Maximum service temperature	375°F (190°C)	375°F (190°C)

ESTIMATING/PACKAGING THEORETICAL QUANTITIES – NO OVERAGE ALLOWANCE

PRODUCT	CODE	PACKAGING	*MIX RATIO
Asplit CN Mortar ASPLIT Phenolic Resin Phenolic CN Powder	 19532 19708	 48 lb pail 55 lb bag	2.25-2.5:1.0 (Powder: Resin) by weight. A unit (158 lb) consists of 1 pail of resin and 2 bags of powder.
Asplit Special Mortar ASPLIT Phenolic Resin Phenolic Special Powder	 19532 19535	 48 lb pail 56 lb bag	3.5:1.0 (Powder: Resin) by weight. A unit (216 lb) consists of 1 pail of resin and 3 bags of powder
F/P Mortar Accelerator (for low temperatures)	22179	45 lb pail	20-25 parts liquid ASPLIT Phenolic Resin to 1 part F/P Accelerator by weight (4-5% of resin). 1 pail is sufficient for 20-25 pails of resin. NOTE: Mix Resin and Powder before adding Accelerator. DO NOT add Accelerator direct to Resin as this may result in a violent reaction.

*NOTE: Mix ratios vary due to ambient air temperatures, and the handling preferences of individual bricklayers. Some bricklayers may vary mix ratio according to specific situations. The above information is provided as a general guide only. For usage rates for specific masonry units, consult Corrosion Engineering estimating guide CES-145.

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.