

Technical Data Sheet

Fast Setting Hydraulic Cement

1. Description:

USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement is a high performance fast setting hydraulic cement that is easily applied. USP™ - ANCHOR-SET is a hydraulic cement compound uniquely modified to control the expansion, initial set, and final set times. After mixing USP™ - ANCHOR-SET with water, it instantly plugs leaks, above or below grade, stopping flowing water thorough holes or cracks in masonry. USP™ - ANCHOR-SET anchors bolts, pipes, mailboxes, and machinery in just minutes. It seals, waterproofs, and has high structural strength that will even set up under water. It is great for marine docks. USP™ - ANCHOR-SET is more durable than the masonry to which it is applied. It is non-metallic, non-oxidizing, and non-toxic when cured and does not shrink, but will expand as it sets.

2. Uses:

USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement may be applied to concrete, masonry, stucco, plaster, brick, stone, metal, and tile. It is recommended for patching floors, walls, stairs, landings, curbs, sidewalks, joints, swimming pools, ponds, water tanks, reservoirs, sludge tanks, foundations, electrical vaults, and conduit holes. USP™ - ANCHOR-SET anchors bolts, signs, pool ladders, machinery, posts, mailboxes, security bars, davits, mooring buoys, seats, racks, and railings.

3. Surface Preparation:

All surfaces shall be clean, free of oil and dirt and be structurally sound. Remove loose particles, dust and other foreign materials from the prepared areas by blowing or vacuuming. Where applicable, cut or chisel out the concrete or masonry surrounding the hole or crack to be filled, to a minimum depth and width of 3/4". Undercut the crack or hole in the shape of an inverted "V", to make the bottom of the cut area wider than the top, and to provide a mechanical bond during initial set and final cure. Wet the areas to be patched with potable water before installing USP™ - ANCHOR-SET.

4. Mixing:

Use clean potable water to quickly and thoroughly mix USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement with a paddle or putty knife. Pour water into a clean mixing container and gradually add USP™ - ANCHOR-SET. Use 1 quart of water to 8 - 9 pounds of material. Rapidly mix to a stiff putty consistency with no slump. Mixing time should not exceed 30 seconds. Mix only the quantity that can be used in about 3 minutes. Mixing water should be about 70 degrees F. Do not use hot water, because material will set too fast and reduce its strength, unless placed immediately after mixing. Slower set will result if cold water is used in mixing. Check setting time with a small batch. A trial batch is recommended to insure ease of mixing.

5. Color/Packaging:

USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement comes in gray or white. Available in 2.5-pound, 10-pound and 50-pound quantities.

6. Application:

6.1 Patching & filling cracks: Place USP™ - ANCHOR-SET with force into damp hole or crack by pushing firmly. Hold material in place for one minute. Keep placed material damp (not wet) for at least 15 minutes. Shave off excess material with knife. For expansion and contraction cracks, do not fill cracks completely to the surface. Allow approximately 1/2" depth and fill with a flexible joint sealant.

6.2 Active leaks under water or running water: Place USP™ - ANCHOR-SET in crack or hole, starting from side to cut flow. Force material in with as much pressure as possible. At point of greatest flow or extreme water pressure, hold USP™ - ANCHOR-SET in hand or trowel until warmth is felt, then press firmly into opening, maintaining pressure until it sets and leak is stopped.

6.3 Anchoring bolts, machinery, etc.: Holes should be drilled deep to secure bolts, and at least 1/2" wider on all sides of bolt. Fill hole

with mixed USP™ - ANCHOR-SET and immediately force bolt, screw, etc. into filled hole and tamp firmly. Keep placed material damp (not wet) for at least 15 minutes. Do not put pressure on bolt, post, etc. for several hours.

7. Coverage:

One dry pound of USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement will fill 17 cubic inches and will repair a crack approximately 30 inches X 3/4" X 3/4". A 50-pound pail of USP™ - ANCHOR-SET will yield 0.45 cubic feet.

8. Limitations:

Use putty knife for mixing and always use gloves. USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement will not permanently seal running water leaks that are caused by thermal or structural movement. Do not apply USP™ - ANCHOR-SET to frozen or frost filled surfaces. Do not twist USP™ - ANCHOR-SET while plugging running water leaks.

9. Cleaning Instructions:

Use soapy water immediately after use to clean hands and equipment. Cured material must be removed by mechanical means

10. Safety Health and Environmental Recommendations:

USP™ - ANCHOR-SET Quick Setting All

Purpose Hydraulic Cement is alkaline on contact with water and contains portland cement and lime. Provide proper ventilation. Do not breathe dust. Avoid coating contact with skin and eyes. Use protective goggles and clothing. In case of eye contact, flood eyes with water and call a physician immediately. Wash hands thoroughly with soap and water after handling. Do not take internally. If ingested, call a physician immediately. Read the Material and Safety Data Sheet for USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement prior to handling or application as supplied by ULTRA SYSTEM PRODUCTS, (305) 591-8300, Fax (305) 591-8568, email: info@ultrasystemproducts.com.

11. Warranty:

ULTRA SYSTEM PRODUCTS (USP™) warrants its USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, USP™ makes no other warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose with respect for USP™. USP™'s sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of USP™ - ANCHOR-SET Quick Setting All Purpose Hydraulic Cement proved to be defective and USP™ shall not be liable for any loss or damage.

Technical Data

TEST	REFERENCE	RESULTS
Compression Strength	ASTM C109	1 hour: 1,835 psi 1 day: 3,125 psi 7 days: 7,808 psi 28 days: 9,543 psi
Tensile Strength	ASTM C190	1 day: 510 psi 3 days: 745 psi 28 days: 855 psi
Flexural Strength	ASTM C78	1 day: 410 psi 3 days: 855 psi 28 days: 1,245 psi
Expansion/Shrinkage - 28 days Moist Room Dry Room	ASTM C157	100% R: 0.081% 50% RH: -0.136%