

Aqua Seal™ material and Airseal™ compound-insulating and sealing materials



Description

Eaton's Cooper Power™ series Aqua Seal™ material provides the most economical answer to permanently sealing, waterproofing and insulating electrical connections or other equipment that may be exposed to adverse environmental conditions. Aqua Seal material saves time and labor costs because it's quick and easy to install. The proprietary formula permanently adheres to itself, cable insulation and metals, creating a positive, watertight seal when properly applied. Its indefinite life expectancy helps ensure power quality. Aqua Seal material is available in pads and rolls to cover any size job. Thoroughly field-proven and in service since 1966, Aqua Seal material has an unparalleled reliability record.

Features

- Employs a blend of tough elastomers for maximum sealing impermeability
- Dielectric strength exceeds 500 volts per mil thickness
- Workable over the widest temperature range: -40 °F to 194 °F (-40 °C to 90 °C)

Benefits

- Impervious to water, salt water, soil chemicals.
- Easily formed by hand pressure to any desired contour
- Best, lowest cost product for sealing and insulating
- Positive adherence to all types of insulation, including crosslinked polyethylene
- Protects connections subject to excessive flexing

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Applications

Aqua Seal material provides an infinite number of sealing and protection possibilities. Its reliability and economic advantages make Aqua Seal material ideal for widely diverse situations.

- Insulate secondary underground cable connections
- Seal around underground vaults and hand holes
- Meter enclosures
- Switchgear
- Cover exposed URD cable ends
- Service entrances
- Seal jacketed, concentric neutral URD cables at elbow terminations or splices
- Animal guard
- Riser pole conduit seal
- Insulate and waterproof overhead connections

Mylar®-backed Aqua Seal material

For extra mechanical protection against puncture or adhesion to oil, pebbles or nearby debris, Mylar®-backed Aqua Seal material is ideal. Mylar® makes a great product even better by eliminating costly and difficult over-taping methods.

Because of its film thickness, Mylar®-backed Aqua Seal material is five times more resistant to penetration than normal vinyl tapes. Available in three versatile pad sizes.



Figure 1. Mylar®-backed Aqua Seal material.

Table 1. Ordering Information

Aqua Seal Material Pads

Catalog No.	Pad Size	No. Per Box
104742-2	3 3/4" X 3 3/4" X 1/8"	25

Aqua Seal Material Roll

Catalog No.	Roll Size
104742	3 3/4" X 10' X 1/8"

Table 2. Ordering Information

Catalog No.	Pad Size	No. Per Box
104757-21	4" X 6 1/4" X 1/8" PAD	24
104757-31	6" X 8" X 1/8" PAD	24

Table 3. Ordering Information

Airseal Compound Pads

Catalog No.	Pad Size	No. Per Box
18415	2 1/2" X 4" X 1/8"	20
18415-8	4" X 4" X 1/8"	25
18415-1	8" X 8" X 1/8"	20

Airseal Compound Roll

Catalog No.	Roll Size
18415-2	2 1/2" X 10' X 1/8"
18415-3	4" X 10' X 1/8"

Airseal™ compound description

Eaton's Cooper Power series Airseal™ compound is a proven cohesive encapsulator that bonds to itself rather than to a connection. This protective formulation effectively seals against moisture, oxidation and corrosion, yet can easily be stripped off when necessary, exposing a clean connection. Fewer man hours on the job for installation or repairs mean lower operating costs and more customer satisfaction. Field-proven since 1952, Airseal compound is unmatched in performance, reliability and ongoing service.

Features

- Workable over the widest temperature range: -40 °F to 194 °F (-40 °C to 90 °C)
- Dielectric strength exceeds 500 volts per mil

Benefits

- Indefinite life expectancy
- Simply and easily molds around connections of any shape.
- Apply under Aqua Seal material for the lowest cost, reenterable connection
- Positive protection from oxidating and corrosive elements
- Helps eliminate radio noise interference

Airseal compound & Aqua Seal material for temporary connections

When situations require a connection that must be reentered for service, use Airseal compound and Aqua Seal material together. Simply mold Airseal compound to an object, then apply Aqua Seal material on top. When access to a connection is needed, cut away the products. The connection is clean and compound-free, the ideal, lowest-cost option for overhead or sub-surface splices or end seals.

Applications

Engineered for re-enterable situations, Airseal compound is a low cost encapsulator that provides moisture, oxidation and corrosion protection for a variety of overhead construction needs.

- Switch connections
- Conductor leads
- Splices and taps
- Transformer bushings
- Arrester leads
- Service entrances
- Animal guard

Radio interference

Radio noise interference from sharp or jagged points on any piece of apparatus is effectively and economically eliminated by applying Airseal compound and molding it into a smooth, rounded shape.

Table 4. Aqua Seal material and Airseal Compound Electrical and Mechanical Specifications

	Aqua Seal Material	Airseal Compound
Color	Black	Gray
Dielectric Strength	500 volts per mil minimum on .020" sample	500 volts per mil minimum on .020" sample
Dissipation Factor	2.98 @ 60 Hz./2.86 @ 1,000 Hz.	2.36 @ 1,000 Hz.
Volume Resistivity	2.4 x 10 ¹⁵ Cm	—
Adhesion	Exceptionally tight adhesion to all types of clean, oil- and dust-free surfaces including XPLE, RHW, THW, rubber neoprene and PE insulation	Excellent cohesion, can be easily removed for inspection or removal of a connection
Temperature Range	Continuous: -40 °F to 194 °F/-40 °C to 90 °C Intermittent: 266 °F/130 °C Flashpoint:>400 °F/204 °C	Continuous: -40 °F to 194 °F/-40 °C to 90 °C Intermittent: 266 °F/130 °C Flashpoint:>450 °F/232 °C
Life Expectancy (in service)	Indefinite. Accelerated and actual weather exposure tests indicate no hardening, drying, shrinking, cracking or loss of adhesion	Indefinite. Accelerated and actual weather exposure tests indicate no hardening, drying, shrinking, cracking or loss of adhesion
Resistant To	Weather, water, water vapor and salt fog.	Weather, water, water vapor and salt fog.
Non-Resistant To	Gasoline, oil, mineral spirits, naphtha and solvents.	Gasoline, oil, mineral spirits, naphtha and solvents.
General Characteristics	Non-oxidizing Non-film-forming Pressure-sensitive permanently flexible 100% solid Specific gravity = 1.60	Non-oxidizing Non-film-forming Pressure-sensitive permanently flexible 100% solid Specific gravity = 1.80 Will not stick to hands, gloves
Other Features	Extremely pliable to ensure good sealing into voids and around various contours Low elasticity means material will not try to return to its original shape	Extremely pliable to ensure good sealing into voids and around various contours Low elasticity means material will not try to return to its original shape
Storage and Handling	Keep sealed in original roll/box Store between 50 °F (10 °C) and 120 °F (50 °C) Do not store near heat source Do not store in direct sunlight	Keep sealed in original roll/box Store between 50 °F (10 °C) and 120 °F (50 °C) Do not store near heat source Do not store in direct sunlight

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Eaton's Cooper Power Systems Division
2300 Badger Drive
Waukesha, WI 53188
United States
Eaton.com/cooperpowerseries

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For Eaton's Cooper Power series insulating and sealing material product information call 1-877-277-4636 or visit: www.eaton.com/cooperpowerseries.