

June, 18 2014

Aeroseal Submittal Data Sheet

The Aeroseal sealant is designed to minimize air leakage from air ducts and exhaust shafts. The sealant shall be supplied by Aeroseal in 1 US Gal containers for field application as a vapor through an Aeroseal aerosolized sealant injection machine.

Product Description

The sealant is white in color and is suspended in water. Vinyl acetate polymer (VAP) and 2-ethyl-1 hexanol (2E1H) are the primary active chemicals in the sealant. The main chemical remaining after curing is VAP, a non-volatile form of vinyl acetate monomer (VAM). 2E1H is a common industrial solvent not considered toxic by OSHA.

Product Application

Repair all major leakage sites (larger than 5/8" span) using mastic and fiberglass mesh tape. Assure the structural integrity of all mechanical joints of existing ductwork using mastic and fiberglass mesh tape. Protect air-moving equipment, air inlets and outlets and other devices and appurtenances as recommended by the manufacturers.

Protect occupied spaces from aerosol particles using manufacturer procedures.

Seal existing ductwork from the inside using automated aerosolize sealant injection. Any injection ports in duct board shall be made and repaired using pumpkin-cuts. Any insulation (internal and external) shall be replaced on the patching plate. Seal all injection openings with duct access doors.

Physical Properties of Sealant

Viscosity = 1.0 centistokes @ 68F

VOC Emissions

Emits no known carcinogens or toxic substances either when in liquid form, or after drying to solid seal form.

Erosion

Aeroseal duct sealant did not break away, crack, peel, flake off, or show evidence of delamination or continued erosion when air was passed through a 12" square duct section containing sealant at a

velocity of not less than 2500 feet per minute when tested for Erosion in accordance with UL Outline Standard 1381 *“Outline of Investigation for Aerosol Duct Sealants”*

Longevity

No visible deterioration when submitted to a minimum of 50,000 simultaneous sinusoidal temperature and pressure cycles of at least 6 minutes per cycle, where the pressure differential across the seals shall vary between 150 Pa and 0 Pa, and the temperature of the air within the duct section is varied between 65F and 200F.

Flame and Smoke Spread

Surface Burning Characteristics

Flame Spread = 0*

Smoke Developed = 0*

*As applied to ¼” inorganic reinforced cement board at an application rate of 400 ft² per gallon. Tests were conducted in accordance with UL Standard 723 *“Test for Surface Burning Characteristics of Building Materials”*, Eighth Edition.

Mold Growth

No mold growth was visible beyond the inoculated area and no significant growth of mold was observed when tested for Mold Growth in accordance UL Outline Standard 1381 *“Outline of Investigation for Aerosol Duct Sealants”*

Durability & Leakage Reduction

Meets the durability and leakage reduction requirements of ASTM Standard E2342-10 *“Standard Test Method for Durability Testing of Duct Sealants”* in accordance with UL Outline Standard 1381 *“Outline of Investigation for Aerosol Duct Sealants”*

ANSI/SMACNA Compliance

Meets ANSI/SMACNA requirements when used as a sealing product for seams and joints of sheet metal air duct systems that are fabricated and installed in accordance with the latest version of ANSI/SMACNA *“HVAC Duct Construction Standards-Metal and Flexible”*

Limitations

Warming of the product in cold weather is necessary before application. There is a solvent odor that will dissipate within a few hours or sealing.

Precautions

Do not allow any ignition sources (i.e. smoking, welding, etc.) in the working area. Allow for proper ventilation, because there is a solvent odor.

Injection of sealant should be stopped to avoid breathing aerosolized sealant if there is sealant is visible in occupied space. Fiber masks or cartridge respirators should be worn at all times when in spaces with high aerosol concentrations. Skin protection is recommended when using with the sealant solvent.

Pregnant women or people with upper respiratory health conditions should not be present during the injection process.