

AAT-595 Moisture Control Membrane Specification Sheet

AAT-595 Moisture Control Membrane is a unique acrylic co-polymer formulated to bond to concrete sub-floors forming a water and alkali resistant membrane. AAT-595 provides protection for flooring installation over new concrete to meet fast track construction schedules. The 595 protects flooring installations from elevated moisture levels in concrete slabs – 95% *in situ* relative humidity, 10lbs of moisture vapor emissions, and pH 11.0 – where these values are shown to be diminishing.

The solvent free, low odor formula is easily applied with a 3/8” roller. As a single coat membrane, the application of the AAT-595 can be finished in a single day increasing job site productivity. AAT-595 can be used over porous sub-floors to increase adhesive spread rates and adhesive performance by reducing adhesive absorption.

AAT-595 is protected by the CleanGuard® two-stage antimicrobial. CleanGuard is a specifically formulated broad-spectrum, anti-microbial agent that protects our adhesives and primers from microorganisms, such as mold or mildew, in both the wet and dry state.

AAT-595 can be used to protect interior installations of broadloom carpet, modular carpet, VCT, VET, LVT/LVP, cork/rubber underlayments and other common flooring products. The 595 is warranted for use solely in conjunction with adhesives manufactured by AAT. AAT-595 is a SCAQMD Rule 1168 VOC compliant sealant. AAT-595 may contribute to the LEED certification of projects in the following categories:

- IEQ Credit 4.1—Low Emitting Materials – Adhesives & Sealants
- IEQ Credit 4.3—Low Emitting Materials – Flooring Systems
- IEQ Credit 5—Regional Materials

TESTING REQUIREMENTS

Prior to the application of AAT-595 to concrete, sub-floors must be tested in strict accordance to the most recent versions of ASTM F-1869 and F-2170. Both testing protocols must be performed in order to provide the most accurate view of the sub-floor’s condition. Sub-floors of lightweight concrete must be tested in strict accordance to the most recent version of ASTM F-2170. The placement of calcium chloride kits and humidity probes must follow the ASTM standards for proper locations and the correct quantity of test sites. These and other tests may be performed by AAT in the event of a warranty claim.

SITE CONDITIONS

Concrete sub-floors must be, at least, 28 days old and no more than 365 days old. Concrete slabs on grade must be protected from ground moisture with a functioning and intact Class A vapor retarder that conforms to the requirements of the most current version of ASTM E-1745. This vapor retarder must be directly beneath, and in contact with, the slab.

Concrete sub-floors must be properly prepared according to the practices detailed in the latest standard, ASTM F-710. All curing agents [topical and admix], adhesives, paints, varnishes, oils, waxes, dust, dirt and any other bond inhibiting substances must be removed. The removal of bond inhibiting substances must be by mechanical means: sanding, shot or bead blasting. AAT-595 cannot be used if adhesive removers, solvent or chemical cleaners have been used. Do not use solvent-based or solvent containing adhesives over AAT-595.

Sub-floors must be porous. To check for appropriate porosity, place quarter sized water drops on the sub-floor in various locations through out the installation site. The water must be fully absorbed into the sub-floor in less than five (5) minutes. If the water is not fully absorbed within the five minutes, the sub-floor must be considered non-porous. The non-porous sub-floor must be made porous by mechanical means including but not limited to grinding, scarifying, abrading, or bead blasting to industry standards.

Prior to applying the AAT-595, deep voids and cracks should be filled with an appropriate filler intended for this purpose. Leveling should occur after the AAT-595 has dried using a polymer fortified portland based cementitious leveler. All sub-floors must be flat and structurally sound. The sub-floor should be flat within 3/16" in 10' or 1/8" in 6'.

NOTE: AAT-595 cannot be used if adhesive removers, solvent or chemical cleaners have been used on the sub-floor. Topical and admix concrete additives can be bond inhibiting substances. Some concrete additives will permanently repel any adhesive or sealer. Due to use of the wide variety of concrete additives a bond test must be performed. If the provided preparation and application instructions are not followed, DO NOT USE AAT-595.

The building should be completely enclosed. All outside doors and windows should be properly installed with latching mechanisms in place. Landscaping should be sufficiently completed to direct water away from the building. Gutters and downspouts should be in place.

Adequate ventilation should be available. The HVAC system for the building should be operating for a minimum of 72 hours prior to the start of the application. The site and product should not be exposed to extremes of temperature, humidity or moisture. The installation site should have a consistent air temperature from 65°F-85°F. The installation site should have ambient relative humidity levels should be 40% - 65%. Both the temperature and ambient relative humidity levels should be established for a minimum of 72 hours prior to the start of the application. The temperature of the sub-floor should be between 65°F-95°F during the application. Acclimate the AAT-595 under these conditions for a minimum of 24 hours prior to the application. These conditions must be maintained to ensure long-term success and performance of the moisture control membrane.

APPLICATION

AAT-595 should be applied from a tray or pail with a 3/8" nap roller. Do not pour the product onto the sub-floor. Keep the roller wet with the material. Apply AAT-595 in a continuous, even coat over the entire floor at the rate of 300 square feet per gallon. It is recommended to mark off a 300 square foot area and cover with one gallon of AAT-595 to observe the proper coverage. AAT-595 contains a pigmented chemical additive that allows for the visual determination of uniformity of coverage and application. Do not allow the product to puddle. Only one coat is required on a properly prepared sub-floor. Allow the membrane to dry for six hours before proceeding with leveling or installation of the floor covering.

Before the application of the membrane, perform several bond tests across the application area. Sweep and clean 24" x 24" areas. Apply three 2-inch strips of masking tape to the floor, overlapping them by 1 inch. Use a 3/8" roller to apply a coat of AAT-595 to the sub-floor, running this application up onto the tape and allowing the area to dry for 6 hours. After 6 hours, carefully peel tape from the floor to the point where the tape, floor and AAT-595 meet. Use a sharp scraper to test whether the membrane can be easily removed. In addition to this, apply 12-inch strips of duct tape to these areas. Snatch the duct tape from the floor to observe whether the AAT-595 comes up with the tape. If the membrane cannot be scraped or peeled from the sub-floor, there should not be bonding issues and the application of AAT-595 can proceed.

To clean up AAT-595 while it is still wet use a clean towel dampened with warm, soapy water. Dried AAT-595 may require the use of AAT-197 or similar safety solvent.

NOTE: Leveling compounds and adhesives will typically require longer tack and drying times when applied over AAT-595. Do not use AAT-595 over expansion joints.

AAT-595's shelf life is one year from the manufacturing date in an unopened and properly stored pail. Do NOT allow the product to freeze. Available in four gallon pails.

Before beginning installations with flooring types or over sub-floors not listed contact AAT Technical Services for recommendations. AAT Technical Services can be reached at 1(800)228-4583 or by email at techservice@aatglue.com. It is the sole responsibility of the applicator of this product to determine the suitability and compatibility of this product for their intended use. If the provided preparation and application instructions are not followed, DO NOT USE AAT-595.

DISCLAIMERS AND SPECIFIC EXCLUSIONS INCLUDE BUT ARE NOT LIMITED TO:

AAT is not responsible for misuse of this product. AAT-595 is not warranted or recommended for use:

- On concrete sub-floors less than 28 days or more than 365 days old.
- Where hydrostatic pressure exists.
- If adhesive removers, solvent or chemical cleaners have been used on the sub-floor.
- If the application is in a facility without a functioning HVAC system.
- Membrane breakage due to cracks in the sub-floor.
- Over sub-floors with a pH greater than 11, MVER above 10lbs./1000 sq ft/24hrs and *in situ* RH greater than 95%.
- If used for an exterior application.



1. Identification

- **Product Use:** Moisture Emission Sealer
- **Manufacturer:** Advanced Adhesive Technologies, Inc.
424 South Spencer Street
Dalton, GA 30721
- **Business Phone:** 800-228-4583
- **Emergency telephone number:** Chemtrec 1-800-424-9300

2. Hazard(s) identification

• Classification of the substance or mixture

This product does not meet the criteria for classification as hazardous under the GHS and 29 CFR 1910.1200

- **Label elements**
- **GHS label elements** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void

- **Classification system:**
- **NFPA rating (scale 0 - 4)**
Health = 1
Fire = 0
Reactivity = 0



- **HMIS-** rating (scale 0 - 4)
Health = 1
Fire = 0
Physical Hazard = 0

3. Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Moisture Emission Sealer
- **Dangerous components:**
No hazardous/reportable components

Cas # 7732-18-5	Water	60-65%
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4. First-aid measures

- **Description of first aid measures**
- **After inhalation:** Overexposure, remove to fresh air and seek medical attention.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available

5. Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.
- **Special hazards arising from the substances or mixture:** Dried solids can burn and release toxic fumes and vapors.
- **Advice for firefighters**
- **Protective equipment:** Protective clothing and respiratory protective device.

6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

- **Environmental precautions:** Dilute with water.

- **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Wash area thoroughly with water.

Dispose of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

- **Reference to other sections**

See section 7 for information on safe handling

See section 8 for information on personal protection equipment

See section 13 for disposal information

7. Handling and storage

- **Precautions for safe handling**

Avoid prolonged or repeated contact with skin.

Avoid contact with eyes.

Wash thoroughly after handling.

- **Information about protection against explosions and fires:** No special measures required.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by store rooms and receptacles:**

Store above 40 °F. Freeze-thaw stable up to five cycles at 20 °F.

- **Information about storage in one common storage facility:** Not required

- **Further information about storage conditions:** Protect product from freezing.

- **Specific end use(s)** No further relevant information available.

8. Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

This product does not contain any relevant quantities of materials with critical values that have to monitor at the workplace.

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment (see listings below)**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment:** Not necessary if room is well-ventilated

- **Protection of hands:** Protective gloves

The glove material has to be impermeable and resistant to the product/the substance/ the preparation.

- **Material of gloves:** latex

- **Eye protection:** Safety glasses with side shields

- **Body protection:** Protective work clothing

9. Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Liquid

Color: White

- **Odor:** Mild odor

- **Odour threshold:** Not determined

- **pH-value at 20°C (68°F):** 7-8

- **Change in condition**

Melting point: Undetermined

Boling point:	212°F (100°C)
• Flash point:	Not applicable
• Flammability (solid, gaseous):	Not applicable
• Ignition temperature:	
Decomposition temperature:	Not determined
• Auto igniting:	Product is not self igniting
• Danger of explosion:	Product does not present an explosion hazard.
• Flammable limits:	
Lower:	Not determined
Upper:	Not determined
• Specific gravity at 20°C (68°F):	1.00-1.02
• Relative density:	Not determined
• Vapour density:	Not determined
• Evaporation rate:	Slower than ether
• Solubility in/Miscibility with Water:	Miscible in water, easy to mix
• Solvent content:	
Organic solvents:	0.0%
Water:	60-65%
• Other information:	California VOC Compliance: Solvent Free Product SCAQMD Rule 1168: VOC compliant

10. Stability and reactivity

- **Chemical stability**
- **Thermal decomposition/conditions to be avoided:** No decomposition if used according to specifications
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11. Toxicological information

- **Information on toxicological effects**

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** May irritate the skin
- **on the eye:** May irritate the eye
- **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- **Carcinogenic categories:**

• IARC (International Agency for Research on Cancer)
None of the ingredients is listed
• NTP (National Toxicology Program)
None of the ingredients is listed
• OSHA-Ca (Occupational Safety & Health Administrations)
None of the ingredients is listed

12. Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Other adverse effects:** No further relevant information available.

13. Disposal Considerations

- **Waste treatment methods**
- **Recommendation:** Comply with current regulations
- **Uncleaned packaging:**
- **Recommendation:** Comply with current regulations.

14. Transport information

• Un-Number	
• DOT, ADR, AND, IMDG, IATA	Not regulated
• UN proper shipping name	
• DOT, ADR, AND, IMDG, IATA	Not regulated
• Transport Hazard class (es)	
• DOT, ADR, AND, IMDG, IATA	
• Class	Not regulated
• Packing group	
• DOT, ADR, IMDG, IATA	Not regulated
• Environmental hazards:	Not applicable
• Special precautions for user	Not applicable
• Transport in bulk according to Annex II of MARPOL73/45 and the IBC Code	Not applicable
• Transport/Additional information:	DOT, ADR, IMDG, IATA – Not regulated in transport. Not dangerous according to the above specifications.
• UN “Model Regulation”:	

Safety, health and environmental regulation/legislation specific for the substance or mixture

• Sara

• Section 355 (extremely hazardous substances):
None of the ingredients is listed
• Section 313 (Specific toxic chemical listings):
None of the ingredients is listed
• TSCA (Toxic Substances Control Act):
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements,

• Proposition 65

• Chemicals known to cause cancer:
None of the ingredients is listed
• Chemicals know to cause reproductive toxicity:
None of the ingredients is listed

• (DSL) Canada Domestic Substance List

All components of this product are on the DSL (Canada Domestic Substance list) or are exempt from SDL requirements

• Cancerogenity categories

• EPA (Environmental Protection Agency)
None of the ingredients is listed
• TLV (Threshold Limit Value established by ACHIH)
None of the ingredients is listed
• NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed

Although the information and recommendations set forth in the SDS are presents in good faith and are believed to be correct as of the date of this SDS, AAT makes not representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will AAT or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.