

Technical Data Sheet [TDS]

AAT-595 Moisture Control Membrane

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.



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1 Identification

- **Product identifier**
- **Trade name:** AAT-595
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Advanced Adhesive Technologies, LLC.
424 S Spencer St
Dalton, GA 30721
Tel: 800-228-4583
Fax: 706-278-6207
- **Emergency telephone number:**
CHEMTREC USA +1 (800) 424-9300 & INTERNATIONAL +1 (703) 527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

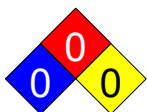
Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
1,2-benzisothiazol-3(2H)-one
- **Hazard statements**
May cause an allergic skin reaction.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves.
If on skin: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see on this label).
Wash contaminated clothing before reuse.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 0
Reactivity = 0

(Contd. on page 2)

US

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 1)

- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

2634-33-5	1,2-benzisothiazol-3(2H)-one	0.369%
127087-87-0	α -(4-nonylphenyl)- ω -hydroxy poly(oxy-1,2-ethanediyl), branched	0.158%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **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:** If symptoms persist consult doctor.
- **Information for doctor:**
- **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:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: **AAT-595**

(Contd. of page 2)

- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

127087-87-0	α-(4-nonylphenyl)-ω-hydroxy poly(oxy-1,2-ethanediyl), branched	30 mg/m ³
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· **PAC-2:**

127087-87-0	α-(4-nonylphenyl)-ω-hydroxy poly(oxy-1,2-ethanediyl), branched	330 mg/m ³
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· **PAC-3:**

127087-87-0	α-(4-nonylphenyl)-ω-hydroxy poly(oxy-1,2-ethanediyl), branched	2,000 mg/m ³
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7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

(Contd. on page 4)

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 3)

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling.

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form:	Fluid
Color:	According to product specification
Odor:	Characteristic
Odor threshold:	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapor pressure at 20 °C (68 °F):** 23 hPa (17.3 mm Hg)

Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.

(Contd. on page 5)

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 4)

· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	23.0 %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **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 Administration)**

None of the ingredients is listed.

US

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 5)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | |
| · DOT, ADN, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, ADN, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

(Contd. on page 7)

US

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 6)

· UN "Model Regulation": not regulated

15 Regulatory information

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

· TSCA (Toxic Substances Control Act):

2634-33-5	1,2-benzisothiazol-3(2H)-one	ACTIVE
127087-87-0	α -(4-nonylphenyl)- ω -hydroxy poly(oxy-1,2-ethanediyl), branched	ACTIVE
7732-18-5	water, distilled, conductivity or of similar purity	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS07

· Signal word Warning

· Hazard-determining components of labeling:

1,2-benzisothiazol-3(2H)-one

· Hazard statements

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/05/2019

Reviewed on 06/05/2019

Trade name: AAT-595

(Contd. of page 7)

- Wear protective gloves.
- If on skin: Wash with plenty of water.
- If skin irritation or rash occurs: Get medical advice/attention.
- Specific treatment (see on this label).
- Wash contaminated clothing before reuse.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Technical Department
- **Contact:** Technical Director
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ACGIH: American Conference of Governmental Industrial Hygienists
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - NFPA: National Fire Protection Association (USA)
 - HMS: Hazardous Materials Identification System (USA)
 - VOC: Volatile Organic Compounds (USA, EU)
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - NIOSH: National Institute for Occupational Safety
 - OSHA: Occupational Safety & Health
 - TLV: Threshold Limit Value
 - PEL: Permissible Exposure Limit
 - REL: Recommended Exposure Limit
 - Skin Sens. 1: Skin sensitisation – Category 1

US