



## Advanced Adhesive Technologies, Inc.

### AAT-322 FG Sheet Vinyl Pressure Sensitive Adhesive Specification Sheet

#### **Description:**

AAT-322 FG Sheet Vinyl PSA is an acrylic based adhesive specifically formulated for installing sheet vinyl with fiberglass cores and PVC cushioned backs intended for use with pressure sensitive adhesives (PSA). AAT-322 can be used on all grade levels over concrete and approved wood sub-floors in the absence of excessive moisture emissions and alkalinity. (MVER max. 5lbs./1000 sq ft/24 hours ASTM F 1869, RH 75% ASTM F 2170, pH 5-10)

AAT-322 is nonflammable, contains no carcinogens, no solvents and is non-toxic. AAT-322 has excellent plasticizer migration resistance. AAT-322 is freeze-thaw stable. This zero VOC adhesive is protected by the CleanGuard® two-stage antimicrobial. CleanGuard® is a specifically formulated broad-spectrum, anti-microbial agent that protects our adhesives and sealers from microorganisms, such as mold or mildew, in both the wet and dry state.



#### **Site Conditions:**

The sub-floor should be prepared according to the standards and practices set forth in the document ASTM F 710. 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.

All concrete, masonry, plastering, drywall, and other wet work should be completed and thoroughly dry prior to beginning the installation. Texturing and paint primer coats should be completed. Where possible the installation of the base molding should not take place until after the flooring has been installed.

Adequate ventilation should be available. The HVAC system for the building should have a consistent temperature of 65-75°F (air and sub-floor) and humidity levels should be between 35-55% for a minimum of 72 hours prior to and following the installation.

Basement and crawl spaces should be dry and adequately ventilated. Sub-floors must be checked for moisture content and emissions using industry accepted methods. Crawl spaces should meet local building codes regarding minimum heights, cross ventilation, and the use of vapor retarders.

Sub-floors must be free from dust, dirt, grease, wax, curing agents, sealers, oil, and any other bond inhibiting substances. The sub-floor should be level within 3/16" in 10' or 1/8" in 6'.

Densified concrete must be dry with moisture emission rates that do not exceed 5 lbs/1000 sq ft / 24 hours as measured by the Anhydrous Calcium Chloride Test (ATSM-1869-04) and for lightweight aggregate concrete the relative humidity of the slab should be less than 75% according to the ASTM F 2170 standard. The concrete surface pH must be between 5 and 10. Before moisture testing begins, the slab must be cured for a minimum of 30 days. Fill low areas with a cementitious leveling compound or latex mild additive latex patch with 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured within the manufacturer's specified requirements before proceeding with the installation. Mechanical surfaces profiling is the preferred sub-floor preparation method. Mechanically profile the sub-floor to medium-grit sandpaper texture. Sanding or scoring with open paper or a titanium disk is preferred. Remove curing and parting compounds and

other surface hardeners and floor coatings according to the manufacturer's instructions. Lightweight or acoustical concrete, less than 3,000 psi, must be primed with a compatible primer such as AAT-570 Primer/Sealer.

For Wood Joist Systems the sub-floor should be structurally sound, free of loose panels or boards, and free of protruding fasteners. Moisture content should be within normal industry standards for the areas average environmental conditions. Underlayment panels should be fastened according to the manufacturer's specifications. All panel seams should be sanded level and prepared according to the manufacturer's instructions. Minimum sub-flooring: 5/8" CDX plywood sub-floor/underlayment (Exposure 1), maximum 16" o.c. construction. Install the flooring perpendicular to the floor joists. Do not install flooring over existing glue-down wood flooring or nailed down wood flooring that is wider than 3 1/4". Wide plank floors must be covered with an acceptable underlayment.

AAT-322 may be used to install over existing sheet vinyl and vinyl tiles if the existing flooring is well bonded. Clean the surface thoroughly and de-gloss the surface using an abrasive pad to create a suitable sub-floor. Resilient sub-floors must be free from dust, dirt, grease, wax, sealers, oil and any other inhibiting substances. These substances must be removed with the appropriate stripper/removers. Fill low areas with a cementitious leveling compound or latex milk additive latex patch with minimum 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured and within the manufacturer's specified requirements before proceeding with the installation. Repair and replace loose flooring products. Never sand any resilient flooring that may contain asbestos fibers. Allow the adhesive to dry to the touch, so that there is little or no transfer of the adhesive to the finger before placing the floor covering.

Slabs with a radiant heating system are acceptable sub-floors for installing sheet vinyl with the following stipulations. The heating system should be fully operational for a minimum of seven days prior to the installation. The system should be shut down to allow the slab to cool down to room temperature before applying adhesive. Immediately after completing the installation turn the system back on and set to normal temperature. The sub-floor cannot exceed 85°F throughout the life of the installation. Check with the system manufacturer to determine that the system is designed for the desired R-rating for resilient flooring. Failure to ensure proper system design can result in excessive heat damage and tile or plank shrinkage.

Follow application and installation procedures provided with the flooring. Regulations may require that existing flooring material or coatings be tested to determine the asbestos content.

**Installation Recommendations:**

1. Flooring and adhesive should be acclimated to the job site conditions for 24 hours prior to the installation.
2. Sub-floor must be cleaned, free of dust, dirt, grease, wax, paint, curing or parting agents or any other substance that may affect the bond. Concrete floors must be level, fully cured, free of excessive moisture emissions, alkali and relative humidity.
3. Be familiar with the recommendations and any special instructions from the flooring manufacturer before beginning the installation. Refer to the information above for specific information regarding subfloor preparation and site conditions.
4. After the sheet vinyl has acclimated and relaxed according to the manufacturer's instructions. Trim the flooring to fit the room. Now roll or lap back approximately half of the flooring to expose the sub-floor.
5. Apply the adhesive according to the flooring manufacturer's recommendations. SEE BELOW. It is the responsibility of the installer to correctly apply the adhesive and in the proper quantity. Pay particular attention to the adhesive application that will fall at the seams. Avoid puddles, thin spots, and voids when applying the adhesive.
6. Allow the adhesive to dry to the touch, not transferring to fingers. High humidity and low temperatures will affect drying time. When applying adhesive over nonporous substrates allow additional time for the

adhesive to dry to a pressure sensitive state. Placing vinyl into wet adhesive will result in an aggressive, permanent bond.

7. Carefully, place the sheet vinyl into the adhesive to avoid trapping air under the flooring. Do not drop or flop the sheet vinyl into place. Using either the “broom method” or a three-section roller (max. 75lb.), according to the flooring manufacturer’s recommendations, remove any trapped air.
8. When the first half is properly adhered, repeat the process for the remaining flooring. Be careful handling the material at the glue line. Do not distort any patterns or tear the backing.
9. Keep traffic to a minimum and avoid placing heavy furniture or appliances for a minimum of 24 hours.

#### **Application and Coverage:**

Apply the AAT-322 with either a U-notched trowel, 1/16” wide x 1/32” deep x 1/32” spacing, or a 3/8” nap roller. Coverage rate is up to 250 square feet per gallon. Note: Applying adhesive with an improper trowel can cause adhesive telegraphing and can affect your warranty and performance. Do not exceed recommended coverage rates.

#### **Specific Technical Data:**

- A. Base: Acrylic Latex Emulsion
- B. Color: White
- C. VOC: 0 g/l SCAQMD Rule 1168. CRI Greenlabel Certified—low VOC PSA
- D. Application method: Apply per recommendations from floor covering manufacturer’s installation instructions.
- E. Freeze-Thaw Stable to 15°F. Stability and spreadability can be affected if allowed to freeze. Frozen material should be allowed to thaw at room temperature. DO NOT agitate or stir while frozen.
- F. Clean-up: Remove wet adhesive with warm water. Use AAT-197 Adhesive Remover to remove dry adhesive.
- G. Shelf-Life: One year from date of manufacture in un-opened container when stored at 70°F.
- H. Sizes: 4 Gallon and 1 Gallon pails

For questions regarding specific installations or usage information contact AAT’s Technical Department Monday thru Friday from 8 a.m. to 5 p.m. (EST) at 800-228-4583. Additional information can also be found thru our website at [www.aatglue.com](http://www.aatglue.com).

\* Determining whether the sub-floor is porous or non-porous is the responsibility of the user. You can check the sub-floor by placing two drops of water in several areas across the sub-floor. The sub-floor is porous if the water is absorbed within a few seconds. If the water beads and is not absorbed within a few seconds the sub-floor is non-porous.

#### **Warranty:**

AAT products are manufacture red to rigid Quality Control Specification and warranted to be free of defects. Defective brought to our attention within one year of manufacture will be replaced at no charge to our customer. Complete warranty information can be obtained by calling 800-AAT-GLUE and requesting a copy or by visiting our Website at [www.aatglue.com](http://www.aatglue.com).



March 2011



## Safety Data Sheet

Print Date: May 13, 2015

## 1. Identification

- **Product Name:** AAT-322
- **Product Use:** FG Sheet Vinyl Pressure Sensitive Adhesive
- **Manufacturer:** Advanced Adhesive Technologies, Inc.  
424 South Spencer Street  
Dalton, GA 30721  
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:** Adhesive
- **Dangerous components:**  
No hazardous/reportable components

Cas # 7732-18-5	Water	31-48%
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- **Trade name:** AAT-322

## 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:**  
CO<sub>2</sub>, 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:** natural rubber
- **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:	Heavy liquid
Color:	white to light beige
- **Odor:** Acrylic
- **Odour threshold:** Not determined
- **pH-value at 20°C (68°F):** 7.5-9.5
- **Change in condition**

Melting point:	Undetermined
Boiling point:	212°F (100°C)
- **Flash point:** Not applicable
- **Flammability (solid, gaseous):** Not applicable
- **Ignition temperature:**

Decomposition temperature:	Not determined
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- **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):** 1.02 – 1.14
- **Relative density:** Not determined
- **Vapour density:** Not determined
- **Evaporation rate:** Slower than ether
- **Solubility in/Miscibility with**

Water:	Miscible in water, difficult to mix
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- **Solvent content:**
  - Organic solvents:** 0.0%
  - Water:** 31-49%
- **Other information:** California VOC Compliance:  
Solvent Free Product  
SCAQMD Rule 1168: VOC compliant

## 10. Stability and reactivity

- **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:**

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

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

## 15. Regulatory information

- **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 known 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



- **Carcinogen categories**

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

## 16. Other information

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.

**Department issuing SDS:** Environment protection department

**Creation date:** May 1, 2015