



Advanced Adhesive Technologies, Inc. AAT-320 Professional Pressure Sensitive Adhesive Specification Sheet

Description:

AAT's next generation of adhesive formulas have been formulated to ensure superior adhesive performance under the very demanding conditions commonly found in today's fast paced construction. AAT-320 raises the bar for the performance of pressure sensitive adhesives. The brand new formula means that contractors may install carpet tile and vinyl backed broadloom carpet over concrete subfloors with elevated moisture emissions or in situ relative humidity levels. AAT-320 may also be used to install vinyl tile (LVT) and approved carpet cushions in double-glue installations. The CRI Green-label Plus Adhesive Certification Program has certified AAT-320 as a "low VOC" adhesive.

AAT-320 is a fast drying, pressure sensitive adhesive specifically formulated for the installation of carpet tiles and double-glue padding over commonly encountered smooth, clean sub-floors. AAT-320 is non-flammable, water resistant and has excellent vinyl plasticizer migration resistance. Like all of our adhesives, this 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.



AAT-320 Professional Pressure Sensitive Adhesive is recommended for the following carpet tile backings and floor coverings:

- Modular carpet, carpet tile: PVC, ethylene vinyl acetate (EVA), polypropylene, polyurethane cushion, bitumen
- Six-foot broadloom carpet: PVC
- Vinyl tile (LVT)
- Approved carpet cushion

All sub-floors must be flat and structurally sound. All concrete curing agents, paints, varnishes, oils, waxes, finishes and any other bond inhibiting substances must be removed prior to applying the adhesive. Smooth or glazed surfaces must be abraded. Repair all joints and cracks with latex-based portland cement underlayments. Concrete slabs on or below grade must have a functioning vapor retarder. This vapor retarder must be directly between the slab and the capillary break. The sub-floor can have a maximum moisture emission rate of 8lbs/1000 sq.ft./24hours for carpet tile [ASTM F1869-10] and 6lbs/1000 sq.ft./24hours for vinyl tile, a pH of 7.0- 10.0 [ASTM F710-11], and maximum *in situ* RH of 90% [ASTM F2170-09] for carpet tile and 85% for LVT. Never sand existing resilient flooring that could contain asbestos. Follow all Federal, State and Local regulations relating to the removal of in-place, asbestos containing material. Very porous sub-floors must be primed with AAT-570 Primer/Sealer.

- Concrete above, on or below grade
- APA rated plywood underlayment
- Properly prepared gypsum cement

NOTE: Before beginning installations with backing systems or over sub-floors not listed contact AAT's Technical Services for recommendations. Strip or plank wood flooring, particleboard and OSB sub-floors should be covered with an approved underlayment (minimum thickness of ¼"). While some Lauan plywood panels are widely marketed as "underlayments", there are a variety of qualities and species sold as such. Some varieties present severe problems when used as underlayments. Frequent problems noted are discoloration, indentation, bond failure, and underlayment delamination. AAT will not warrant the adhesive when applied over Lauan plywood. Regulations may require that existing flooring material or coatings be tested to determine the asbestos content. Refer to the instructions for removal and handling of resilient flooring published by the RFCI in the publication, *Recommended Work Practices for Removal of Resilient Floor Coverings*. The Resilient Floor Covering Institute may be reached thru their Website www.rfci.org or by calling 301-340-8580.

Typical Trowels and approximate coverage (depth x width x spacing):

Carpet Tile: 1/32" x 1/16" x 1/32" U notch trowel: 180-250 sq. ft. /gal.

6' Broadloom carpet and cushion: 1/16" x 1/16" x 1/16" sq notch trowel: 150 sq. ft. /gal

Vinyl Tile: Porous sub-floors: 1/16" x 1/16" x 1/16" U or L notch trowel: 125-150 sq ft/gal

Non-porous sub-floors: 1/16" x 1/16" x 1/16" V notch trowel: 180-200 sq ft/gal

Installation Recommendations: The building should be completely enclosed. All outside doors and windows should be properly installed with latching mechanisms in place. Adequate ventilation should be available. The temperature of the sub-floor should be 65°- 90°F during the installation. The HVAC system for the building should be operational and provide a consistent air temperature of 65-75°F and humidity levels should be between 35-55% for a minimum of 72 hours prior to the installation. These conditions must be maintained to ensure the long term success and performance of the installation.

1. Flooring and adhesive should be acclimated to the job site conditions for a minimum of 24 hours prior to the installation.
2. Be familiar with the recommendations and any special instructions from the flooring manufacturer before beginning the installation. Follow the flooring manufacturer's specific recommendations regarding seam sealing.
3. Refer to the information above for specific information regarding sub-floor preparation and site conditions.
4. When installing carpet tile and vinyl tile (LVT) spread the adhesive with the appropriate trowel and allow the adhesive to dry to a clear, tacky state. Place the carpet tile or LVT into the dry, pressure sensitive adhesive. When installing carpet tile AAT-320 has a working time of up to 24hours. For LVT installations only spread as much adhesive as can be covered with the flooring in under six hours.¹ When installing carpet tile AAT-320 can be applied with a roller, but caution must be exercised to maintain an adequate adhesive coverage. For most applications the spread rate should not exceed 350 sq. ft. /gal.
5. For use with six-foot broadloom and carpet cushion, spread the adhesive with the appropriate trowel and allow it to develop tack. DO NOT allow the adhesive to "skin-over" or dry. Place the flooring into the "wet-tacky" adhesive while the adhesive is still wet enough to transfer to the back of the flooring.
6. Roll the installed flooring with the appropriate three-section roller. For carpet use a 50-75lb roller and for LVT use a 75-100lb roller. Rolling should take place immediately after the flooring is placed into the adhesive.
7. It is recommended to minimize traffic over the newly installed flooring for at least 24 hours after the installation has been completed. Do not wash or clean the floor for five days after completion of the installation. To replace furniture and appliances use plywood panels to protect the flooring.

Specific Technical Data:

- A. Base: Acrylic-Ester Emulsion
- B. Color: White
- C. Clean-up: Remove wet adhesive with water and mild soap solution. Use AAT-197 Adhesive Remover to remove dried adhesive. Dried adhesive may be more difficult to remove; therefore, take care to remove adhesive from the surface of the flooring before it dries. DO NOT apply the solvent directly to the flooring material.
- D. Packaging: 4 gallon pails and one gallon pails (4 per case)
- E. Shelf-Life: One year from date of manufacture in un-opened container when stored at 70°F.
- F. Freeze-Thaw Stable to 15°F. Stability and spread-ability can be affected if allowed to freeze. Frozen material should be allowed to thaw at room temperature. DO NOT agitate or stir while frozen.
- G. VOCs: 0 g/l (Calculated per Ca. Rule 1168)
- H. Not recommended for exterior installations.

NOTE: We recommend installers follow the guidelines set forth in the CRI's *Carpet Installation Standard*. Before placing the floor covering, the adhesive must be allowed an open or dwell time appropriate for the carpet backing or flooring, jobsite and sub-floor conditions. ¹AAT-320 has an extended working time up to 24 hours after the initial drying for carpet tile and 6 hours for vinyl tile if the area is kept dust free. It is extremely important to maintain recommended notch depth, width and spacing. The proper notch depth is that which will produce adhesive ridges that affect a 100% transfer to both the substrate and the carpet backing to include the inner recesses of the texture of the back.



August 15, 2011 (Replaces May 2011)

MATERIAL SAFETY DATA SHEET

NPCA HMIS

H = 1
F = 0
PH = 1

Prepared by: Tim Brown
Date of Prep: 08/18/08

SECTION I

Manufacturer's Name: Advanced Adhesive Technologies, Inc.
Street Address: 419 South Glenwood Avenue Dalton, GA 30721
Emergency Telephone No.: Chemtrec 1-800-424-9300
General Information No.: 1-800-228-4583
Product Class: Floor Covering Adhesive
Manufacturer's Code Identification: AAT-320
Trade Name: Carpet Tile Adhesive

SECTION II — HAZARDOUS INGREDIENTS

None

SECTION III — PHYSICAL DATA

Boiling Range: > 212°F
Vapor Density: Heavier
Evaporation Rate: Slower than Ether
Percent Volatile by Volume: 39% ± 2.0
VOC Emission: 0 g/l (calculated per SCAQMD Rule 1168)

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

DOT Category: Latex Emulsion
Flash Point: N.A.
LEL: Not Known
Extinguishing Media: Water mist, dry chemical, or mechanical foam
Unusual Fire and Fighting Hazards: None
Special Fire Fighting Procedures: None

SECTION V — HEALTH HAZARD DATA

Threshold Limit Value: Non-Established
Effects of overexposure: May cause eye and skin irritation after prolonged exposure.
Emergency and First Aid Procedures: Eye Contact: Wash with plenty of cold water for at least 15 minutes. Contact a physician if ingested.

SECTION VI — REACTIVITY DATA

Stability: Stable
Incompatibility: None
Conditions to avoid: Closed area with open container
Hazardous Decomposition Products: Carbon Monoxide and Carbon Dioxide by thermal decomposition
Hazardous Polymerization: Will not occur
Conditions to avoid: Not known

SECTION VII — SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Collect in suitable container, wash area with plenty of soapy water.
Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.

SECTION VIII — SPECIAL PROTECTION INFORMATION

Respiratory Protection: Proper Ventilation
Ventilation: Forced Air
Protective Gloves: Impervious gloves
Eye Protection: Safety glasses or goggles.
Other Protective Equipment: Normal work clothes

SECTION IX — SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing: Store in a cool, dry place. Optimum storage temperature 70°F. Keep sealed when not in use. Shelf life: One year from date of manufacturing in an unopened container.
Other precautions: Follow good housekeeping practices. Keep from freezing. If frozen allow to thaw at room temperature. Do NOT agitate or stir while frozen.