

AAT-320 Professional Pressure Sensitive Adhesive Specification Sheet

AAT'S GO2 Adhesive formulas have been formulated to ensure superior adhesive performance under the very demanding conditions commonly found in today's fast paced construction. As a GO2 Adhesive 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
- Vinyl tile (square LVT)
- Approved carpet cushion

AAT-320 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

GREEN LABEL +PLUS Indoor Air Quality Carpet Testing Program

Sub-floor and Site Conditions:

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

Sub-floors on and below 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. Gypsum sub-floors must meet the requirements of the most current version of ASTM F-2419. 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-320 cannot be used if adhesive removers, solvent or chemical cleaners have been used.

The maximum moisture emission rate of the sub-floor cannot exceed 8lbs/1000 sq.ft./24 hours [ASTM F-1869], with a pH of 7.0- 9.0 [ASTM F-710], and a maximum *in situ* RH of 90% [ASTM F-2170] for carpet tile. The maximum moisture emission rate of the sub-floor cannot exceed 6lbs/1000 sq.ft./24 hours, with a pH of 7.0-9.0, and a maximum in situ RH of 80% for vinyl tile and approved carpet cushion. Prior to the application of AAT-320, 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.

All sub-floors must be flat and structurally sound. Smooth or glazed surfaces must be abraded. Repair all joints and cracks with latex-based portland cement underlayments. 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.

NOTE: Strip or plank wood flooring, particleboard and OSB sub-floors should be covered with an approved underlayment (minimum thickness of $\frac{1}{2}$ "). AAT-320 cannot be used if adhesive removers, solvent or chemical cleaners have been used. Before beginning installations with backing systems or over sub-floors not listed contact AAT's Technical Services for recommendations. AAT Technical Services can be reached at 1(800)228-4583 or by email at $\frac{\text{techservice@aatglue.com}}{\text{techservice@aatglue.com}}$. 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-320.

Installation Recommendations:

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

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Carpet tile: 1/32'' \times 1/16'' \times 1/32'' U notch trowel – 180-250 sq. ft./gal.
Vinyl Tile: Porous sub-floors – 1/16'' \times 1/16'' \times 1/16'' \cup notch – 125-150 sq. ft./gal. and Non-porous sub-floors – 1/16'' \times 1/1
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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 HVAC system for the building should be operational and provide a consistent temperature of 65-85°F (air and sub-floor) and humidity levels should be between 40-65% 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 sub-floors.
- 3. Refer to the information above for specific information regarding sub-floor preparation and site conditions. Spread the adhesive with the appropriate trowel as defined above. Allow the appropriate dwell or open time.
- 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 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 cushion into the "wet-tacky" adhesive while the adhesive is still wet enough to transfer to the back of the cushion.
- 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 latest version of the CRI's *Carpet Installation Standard* - 104. Before placing the carpet, the adhesive must be allowed an open or dwell time appropriate for the carpet backing, jobsite and sub-floor conditions. 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.

¹ AAT-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.





Safety Data Sheet

Print Date: April 7, 2016 (Replaces May 13, 2015)

1. Identification

• Product Name: AAT-320

• **Product Use:** Professional 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%

• Trade name: AAT-320

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: 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 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): 1.05 – 1.07

• Relative density: Not determined

• Vapour density: Not determined

• Evaporation rate: Slower than ether

• Solubility in/Miscibility with

Water: Miscible in water, difficult to mix

• Solvent content:

Organic solvents: 0.0% Water: 31-48%

• 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 skinon 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":	

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 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

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