

# **AAT-299 Ultra Premium Spray Grade Adhesive Specification Sheet**

This medium-firm setting, quick grab adhesive is excellent for "double glue down" installations, woven carpets, and carpets with stiff unitary backings or attached cushions. AAT-299 is a safe, light colored, low odor, latex based adhesive designed to maximize installer efficiency. AAT-299 is specially formulated for the installation of urethane foam backed carpets (Enhancer I, II, III, IV, and Durafoam) and may also be used to install all other carpet backings, but should not be used with pure vinyl's (resilient or carpets). 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. AAT-299 is backed by a Limited Lifetime Warranty (for installations after Feb. 1, 2003).

AAT-299 Ultra Premium Adhesive can be used for the following carpet backings and floor coverings:

- Direct-Glue: woven polypropylene (ActionBac®, hot melt, etc.) latex unitary, polyurethane foambacked (Enhancer® I,II,III,IV, BioCel™ and Durafoam), rubber backs, woven, axminster, needlepunch, and jute
- Double-Glue: AAT-299 is recommended for double-glue "carpet to pad" applications with specific carpet backings approved by AAT for this application. This adhesive can also be used to adhere approved double-glue carpet cushions.
- Although this adhesive is formulated for carpet installations, because of its nonstaining characteristics, it can be used to install felt backed sheet vinyl.

**Note:** This adhesive is not recommended for vinyl backed (PVC) sheet goods or carpets with urethane unitary or vinyl (PVC) backings.

AAT-299 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

#### **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-299 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]. Prior to the application of AAT-299, 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 ¼"). AAT-299 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 <a href="techservice@aatglue.com">techservice@aatglue.com</a> .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-299*.

## Typical Coverage Rates (Using AAT Universal Adhesive Sprayer US-1)

Spray Tip # 80 – 10	Spray Tip # 80 – 10	Spray Tip # 80 – 06
90-108 sq. ft. per gal	72 – 90 sq. ft. per gal	180 – 198 sq. ft. per gal
(40-50% overlap spray)	(60 % overlap spray)	(No overlap)
ActionBac, Enhancer Backs,	Latex Unitary, hot melt,	Double Glue (Pad to Floor),
Foam Backs, Life Span or	Double Lock ActionBac,	Felt backed Sheet Vinyl
Premier Plus	Double Glue (Carpet to Pad)	

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 subfloors and seam sealing.
- 3. Refer to the information above for specific information regarding sub-floor preparation and site conditions.

- 4. Spray the adhesive with the appropriate tip and overlap as defined above. Allow the appropriate dwell or open time. Lay the flooring into the adhesive as to minimize bubbles and wrinkles.
- 5. Roll the flooring with a three-section roller [Carpet 75lb. for direct glue and 35lb. double-glue; Sheet vinyl 100lb.] to ensure adequate transfer. Wet adhesive transfer to the flooring must be 100%.
- 6. Roll the flooring "north to south" and "east to west" from center to edge forcing out air pockets and eliminating wrinkles.

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

Base: SBR-resin emulsion

Color: yellow-tan

· Flammability: Non-flammable

Shelf Life: One year from date of manufacture in an unopened container

- Freeze-Thaw Stable: If frozen, allow to thaw at room temperature. Do NOT stir or agitate while
  frozen. Stability and spread-ability can be reduced if frozen. For best results do not allow to
  freeze.
- Clean-up: Remove wet adhesive with damp cloth (plain water). Use AAT-197 Adhesive Remover for dried adhesive.
- VOCs: 0 g/l (Calculated per Ca. Rule 1168); Solvent Free
- 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 coverage and application. The proper coverage is that which will produce adhesive volume that affect a 100% transfer to both the substrate and the carpet backing to include the inner recesses of the texture of the back.





#### Safety Data Sheet

Print Date: May 13, 2015

#### 1. Identification

• Product Name: AAT-299

• **Product Use:** Ultra Premium Spray 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
 Hazard pictograms
 Signal word
 Hazard statements

• 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: AdhesiveDangerous components:

No hazardous/reportable components

Cas # 7732-18-5	Water	31-48%

• Trade name: Masterbond 188

#### 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 paste

Color: Tan to light beige

• Odor: Resinous

Odour threshold: Not determinedpH-value at 20°C (68°F): 9.3-10.8

• 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): 1.02 – 1.26

• 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 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
<ul> <li>Transport in bulk according to Annex</li> </ul>	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