## Advanced Adhesive Technologies, Inc. AAT-677 Universal Multi-Purpose Spray Adhesive Specification Sheet

#### I. Description:

A truly "multipurpose" adhesive, AAT-677, can be used to install virtually any floor covering product. So versatile, the *patented* formula has redefined the installation process. It can be used as a "wet set" adhesive to install carpet or resilient products over any structurally sound, porous subfloor.

AAT-677 can be used in the same fashion as a conventional carpet or resilient adhesive. When installing VCT, pure vinyl tile, or carpet tiles it can be allowed to dry completely, even overnight if need be. This is because of it residual, pressure sensitive nature, a real advantage, providing the installer with a new degree of flexibility in regard to his work practices. If, for some reason, a bubble should develop, simply pressing the material firmly into the adhesive can easily eliminate it.

AAT-677 is chemically compatible with every known floor covering backing system presently in use in the industry. Not only that, it sets new standards for tolerance of moisture emission and alkali. While the rest of the industry recommends the moisture emission rate not to exceed 3 lbs./1,000 sq. ft./24 hrs., AAT-677 will not break down, decompose or re-emulsify when used over floors emitting as much as 5 lbs./1,000 sq. ft./24 hrs. It will also perform in highly alkaline environments. The pH range, generally considered acceptable by the industry is 5 to 9. AAT-677 will tolerate a pH range, generally considered acceptable with every known floor covering backing system presently in use in the industry. Not only that, it sets new standards for tolerance of moisture emission and alkali. While the rest of the industry recommends the moisture emission rate not to exceed 3 lbs./1,000 sq. ft./24 hrs., AAT-677 will not break down, decompose or re-emulsify when used over floors emitting as much as 5 lbs./1,000 sq. ft./24 hrs. It will also perform in highly alkaline environments. The pH range, generally considered acceptable by the industry is 5 to 9. AAT-677 will tolerate a pH up to 11; **one thousand times the present maximum.** This revolutionary adhesive cirtually eliminates the possibility of an installer selecting the wrong glue and the need for him to be an expert on floor covering manufacturing, construction, backing systems, and chemistry.

Due to its broad "window of opportunity" in regard to its usage, and its greater tolerance of moisture emissions and alkali, it moves the installer farther from the "edge of the envelope," greatly increasing the "probability of success" in the installation of virtually everything.

#### II. Recommended for use with:

Woven, needle punched or tufted carpets with just, woven polypropylene (ActionBac®), hot melt (UniBond®), latex or urethane unitary backings. Rubber or urethane attached cushions: PVC carpet tile and 6 ft. broadloom; mineral, paper, or felt backed vinyl sheet goods, linoleum, sheet rubber flooring, homogenous sheet vinyl designed for "full spread" installations, and vinyl



compositions, rubber, cork and pure vinyl tiles can also be installed with AAT-677. Double glue down installations with approved cushions can be done with AAT-677. It can also be used for outdoor direct glue down installations of products designed for outdoor use.

**Subfloor surfaces:** APA rated underlayment grade plywood, hardboard, Assn. Grade particle board (when approved by flooring manufacturer), existing well bonded resilient flooring (cushioned or heavily embossed vinyl should be properly prepared with an approved embossing leveler), terrazzo, and structurally sound, clean, level concrete (on, above or below grade) with a moisture emission rate not to exceed 5 lbs./1,000 sq.ft./24 hrs. and a pH below 11.

#### **Specifications:**

• Patented polymer blend • Solvent Free • 0 VOC (calculated) • Non-Flammable • Open time: can be used as a "wet set" with no open time, allowed to dry completely, or anywhere in between (see installation instructions) • Freezethaw stable to 10°F • Shelf life: 1 year in unopened container • Clean up: Wet-warm water and detergent; Dry-AAT-197 Adhesive Remover or AAT-1905 Universal Cleaner

#### III. Installation Recommendations:

- 1. Flooring materials must be stored in a pre-heated building where room and sub-floor temperature should be no less than 65°F, 24 hours before, during and after installation. US-1 Sprayer unit must also be acclimated to room temperature before any adhesive can be placed into canister.
- 2. Subfloors must be clean, free of dust, dirt, grease, wax, paint, or any other substance that may affect the bond. Sub-floors must be structurally sound, level, free of curing or parting agents with a moisture emission rate not to exceed 5lbs./1,000 sq. ft./24 hrs. and a pH below 11.
- 3. Since this product can be used to install so many floor covering products, correct spray equipment and tip selection is required. A smooth uniform application should be achieved to ensure proper to ensure proper surface area contact between the floor covering and subfloor. AAT-677 should be sprayed exclusively through the US-1 spray unit using tip number 80-06.

#### TYPICAL COVERAGE RATES AND APPLICATION PATTERNS:

• 10-12 sq/yds per gallon or 2.2-2.6 m<sup>2</sup>/L (40% over lap of spray)

Woven polypropylenes (ActionBac®), Enhancer® Backs, Foam Backs, Life Span® Premier Plus®

• 8-10 sq/yds per gallon or 1.7-2.2 m<sup>2</sup>/L (60% over lap of spray)

Latex Unitary (20lbs. tuft bind), UniBond, Double Lock ActionBac, Double Glue (carpet to pad)

• 18-20 sq/yds per gallon or 4.2-4.5 m<sup>2</sup>/L (no over lap of spray)

Sheet vinyl, VCT, carpet tile, Double Glue (pad to floor)

# Coverage rates may vary with condition of sub-floor, pad and flooring texture. Do Not exceed the flooring manufacturer's specification for adhesive coverage rates.

- 4. When installing many products over porous substrates there is no need to allow "open time," however, some flooring materials, such as VCT, carpet tiles, and rubber tiles are more efficiently installed after the adhesive has dried completely. When installing nonporous backed materials over nonporous substrates, appropriate "open time" is recommended.
- 5. Place broadloom and sheet goods into adhesive to minimize air bubbles and wrinkles.
- 6. Roll flooring with an appropriate sized roller (resilient: 75-100 lbs., carpet: direct glue, 50-75 lbs., double glue, 35-50 lbs.) to ensure adequate adhesive transfer. Should bubbles develop or edges curl (a common problem with some of today's floor coverings), allow adhesive to dry and re-roll.
- 7. Direct glue down carpet placed into "wet" adhesive should be protected from foot traffic for at least 12 hours and heavy and/or roller traffic (including the placement of heavy furniture) for 24 hours. Traffic restrictions for resilient and "double glue" carpet installations should be extended to at least 24 and 48 hours, respectively. Installations over "dry" adhesive can be exposed to foot traffic immediately.
- 8. Clean-up: Remove wet adhesive with cloth dampened in tap water. Use AAT-1905 Universal Cleaner or AAT-197 Adhesive Remover to clean dried adhesive. Check colorfastness before using either cleaner on flooring or any other surface. Clean the US-1 Sprayer according to the instructions provided with the sprayer before changing adhesives and after completing each installation.

09/23/2009



#### Safety Data Sheet

Print Date: May 13, 2015

## 1. Identification

• Product Name: AAT-677

Product Use: Spray Grade Multipurpose 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: AAT-677

## 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.

424 South Spencer Street Dalton, GA 30721 800-228-4583 Fax 706-278-6207

## 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): 1.02 – 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

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 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	

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