

# AAT-295 Ultra Premium Adhesive Technical Data Sheet [TDS]

AAT-295 Ultra Premium Adhesive is a *Go2 Adhesive* intended for the most challenging commercial carpet installations. AAT's *Go2 Adhesive* formulas have been formulated to ensure adhesive performance under the very demanding conditions commonly found in today's fast paced construction. AAT-295 again raises the bar for adhesive performance in the flooring industry. The brand new formula means that contractors may install high performance broadloom carpet backings over concrete subfloors with elevated moisture emissions and *in situ* relative humidity levels. The CRI Green-label Plus Adhesive Certification Program has certified AAT-295 as a "low VOC" adhesive.

AAT-295 reduces the amount of open or dwell time required when installing high performance carpets, thereby dramatically increasing the installer's daily production capabilities without compromising the integrity of the installation. This high solids, low odor, solvent free and installer friendly adhesive can be used with virtually all broadloom carpets and is especially recommended for high performance carpet backings. 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-295 Ultra Premium Adhesive may be used over concrete, APA rated plywood underlayment, gypsum concrete and gypsum cement toppings. AAT-295 can be used for the following carpet backings and applications:

• Direct-Glue: woven polypropylene (ActionBac®, hot melt, etc.) latex unitary, polyurethane foam-backed (Enhancer® I,II,III,IV, BioCel™ and Durafoam), rubber backs, woven, axminster, needlepunch, and jute

Note: This adhesive is not recommended for pure vinyl backed sheet goods or carpets.

AAT-295 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-295 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 95% [ASTM F-2170]. Prior to the application of AAT-295, 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-295 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 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-295.* 

#### **Installation Recommendations:**

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

Woven polypropylene, woven, axminster: 1/8" x 1/8" x 1/8" U notch, 100 sq. ft. /gal.

Attached cushions: 3/32" x 3/32" x 3/32" V notch, 125 sq. ft. /gal.

**Unitary:** 1/8" x 1/8" x 1/16" U notch, 50 sq. ft/gal.

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 and seam sealing.
- 3. Refer to the information above for specific information regarding sub-floor preparation and site conditions.
- 4. Spread the adhesive with the appropriate trowel as defined above. Allow the appropriate dwell or open time. Lay the carpet into the adhesive as to minimize bubbles and wrinkles.
- 5. Roll the carpet with a 75lb., three section roller to ensure adequate transfer. Wet adhesive transfer to the carpet must be 100%.
- 6. Roll the carpet "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)
- 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.

<sup>1</sup>Effective November 1, 2015





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### 1 Identification

· Product identifier

· Trade name: AAT-295

Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Advanced Adhesive Technologies, LLC.

424 S Spencer St Dalton, GA 30721 Tel: 800-228-4583 Fax: 706-278-6207

· Emergency telephone number:

CHEMTREC USA +1 (800) 424-9300 & INTERNATIONAL +1 (703) 527-3887

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





GHS07 GHS08

- · Signal word Warning
- · Hazard-determining components of labeling:

ethyl acrylate

1,2-benzisothiazol-3(2H)-one

· Hazard statements

May cause an allergic skin reaction.

Suspected of causing cancer.

**Precautionary statements** 

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

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Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- NFPA ratings (scale 0 4)



Health = 0 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 0 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:				
1332-58-7	Kaolin	44.49%		
140-88-5	ethyl acrylate	0.844%		

### 4 First-aid measures

- Description of first aid measures
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · 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: If symptoms persist consult doctor.
- · Information for doctor:
- · 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: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.

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- · Advice for firefighters
- · Protective equipment: No special measures required.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

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.

· Protective Action Criteria for Chemicals

2-5 Disti	stillates (petroleum), hyd	drotreated heavy	naphthenic	140 mg/m <sup>3</sup>
8-5 ethy	nyl acrylate			8.3 ppm
3-6 urea	a			30 mg/m <sup>3</sup>
3-5 2-ar	aminoethanol			6 ppm
5-9 non	nylphenolethoxylates			43 mg/m <sup>3</sup>
·				•
2-5 Dist	stillates (petroleum), hyd	drotreated heavy	naphthenic	1,500 mg/m
8-5 ethy	nyl acrylate			36 ppm
3-6 urea	a			280 mg/m <sup>3</sup>
3-5 2-an	aminoethanol			170 ppm
5-9 non	nylphenolethoxylates			470 mg/m³
2-5 Dist	stillates (petroleum), hyd	drotreated heavy	naphthenic	8,900 mg/m
8-5 ethy	nyl acrylate			240 ppm
3-6 urea				1,700 mg/m
3-5 2-an	aminoethanol			1,000 ppm
5-9 non	nylphenolethoxylates			5,400 mg/m

## 7 Handling and storage

- · Handling:
- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep respiratory protective device available.

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- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · 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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

At this time, the other constituents have no known exposure limits.

#### 1332-58-7 Kaolin

PEL Long-term value: 15\* 5\*\* mg/m³

\*total dust \*\*respirable fraction

REL Long-term value: 10\* 5\*\* mg/m³

\*total dust \*\*respirable fraction

TLV Long-term value: 2\* mg/m<sup>3</sup>

E; as respirable fraction

#### 140-88-5 ethyl acrylate

PEL Long-term value: 100 mg/m³, 25 ppm

Skin

REL See Pocket Guide App. A

TLV Short-term value: 61 mg/m³, 15 ppm Long-term value: 20 mg/m³, 5 ppm

· Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properti	ies en la companyation de la compa			
· Information on basic physical and chemical properties				
General Information				
· Appearance:				
Form:	Fluid			
Color:	According to product specification			
· Odor:	Characteristic			
· Odor threshold:	Not determined.			
· pH-value:	Not determined.			
· Change in condition				
Melting point/Melting range:	Undetermined.			
Boiling point/Boiling range:	Undetermined.			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	Not applicable.			
Decomposition temperature:	Not determined.			
· Auto igniting:	Product is not selfigniting.			
Danger of explosion:	Product does not present an explosion hazard.			
· Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
· Vapor pressure:	Not determined.			
· Density:	Not determined.			
· Relative density	Not determined.			
· Vapor density	Not determined.			
· Evaporation rate	Not determined.			
· Solubility in / Miscibility with				
Water:	Not miscible or difficult to mix.			
· Partition coefficient (n-octanol/water)	: Not determined.			

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Viscosity:
 Dynamic:
 Kinematic:
 Not determined.
 Not determined.

· Solvent content:

 Organic solvents:
 0.4 %

 Water:
 15.9 %

 VOC content:
 0.35 %

3.5 g/l / 0.03 lb/gal

• Other information No further relevant information available.

## 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · 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: No dangerous decomposition products known.

## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· I	ו/ח	CEO	value	that are	relevant	for	clacei	fication:
· L	_U/L	. 🔾 อบ	values	mai are	reievani	101	CIASSII	IICALIOII.

#### 140-88-5 ethyl acrylate

 Oral
 LD50
 800 mg/kg (rat)

 Dermal
 LD50
 1,834 mg/kg (rabbit)

 Inhalative
 LC50/4 h
 2,180 mg/l (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

İrritant

· Carcinogenic categories

IARC (International Agency for Research on Cancer)

140-88-5 ethyl acrylate

2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

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.
- Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- Other adverse effects No further relevant information available.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · **Recommendation:** Disposal must be made according to official regulations.

14 Transport information		
· UN-Number · DOT, ADN, IMDG, IATA	not regulated	
	not regulated	
· UN proper shipping name · DOT, ADN, IMDG, IATA	not regulated	
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	not regulated	
· Packing group		
· DOT, IMDG, IATA	not regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
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· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation": not regulated

## 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· TSCA (Toxic Substances Control Act):				
1332-58-7				
	Petroleum Hydrocarbon Resin			
64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic			
140-88-5	ethyl acrylate			
57-13-6	urea			
141-43-5	2-aminoethanol			
	nonylphenolethoxylates			
	1,2-benzisothiazol-3(2H)-one			
7732-18-5	water, distilled, conductivity or of similar purity			

### Proposition 65

· Chemicals known to cause cancer:

140-88-5 ethyl acrylate

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)				
57-13-6 urea	II			
· TLV (Threshold Limit Value established by ACGIH)				
1332-58-7 Kaolin	A4			
140-88-5 ethyl acrylate	A4			

### · NIOSH-Ca (National Institute for Occupational Safety and Health)

140-88-5 ethyl acrylate

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms





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· Signal word Warning

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## · Hazard-determining components of labeling:

ethyl acrylate

1,2-benzisothiazol-3(2H)-one

#### · Hazard statements

May cause an allergic skin reaction.

Suspected of causing cancer.

### · Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of water.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Technical Department

· Contact: Technical Director

### · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Sens. 1: Skin sensitisation - Category 1

Carc. 2: Carcinogenicity - Category 2

US