



## Advanced Adhesive Technologies, Inc. AAT-390 Marine and Exterior Adhesive

AAT-390 is a solvent free, copolymer adhesive specifically designed for the professional installation of marine carpets and sheet vinyl. AAT-390 offers excellent resistance to moisture when fully cured. AAT-390 is compatible with most carpet backings and felt back sheet goods. AAT-390 is non-flammable, freeze - thaw stable (if allowed to freeze, thaw out at room temperature (70oF+) before using, do not stir adhesive while ice crystals are present). 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-390 Marine and Exterior Adhesive is recommended for the following installations:

- A. Marine and outdoor carpets with the following backings:
  - a. Rubber-backed (Marine, waffle, foam)
  - b. Non-backed (Tufted or woven)
  - c. Woven polypropylene (ActionBac®)
  - d. Latex unitary
  - e. Jute
  - f. PVC
  - g. Polyurethane cushion (Enhancer®, Kangaback®)

*Not for use with carpets having urethane unitary backings.*



- B. Sheet vinyl:
  - a. Felt back
  - b. Vinyl [PVC] backings
- C. Subfloor Surfaces: Sub-floors must be flat and structurally sound. The sub-floor should be flat within 3/16" in 10' or 1/8" in 6'. All paint, varnish, oil, wax, finishes and any other bond inhibiting substances must be removed. Smooth or glazed surfaces must be abraded. Repair all joints and cracks with latex-fortified portland cement underlayment. Concrete sub-floors must be properly prepared according to the recommended practices detailed in the document ASTM F-710. 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.

AAT-390 can be used over the following sub-floors. For interior applications over concrete and gypsum cement the maximum moisture emission rate of 5lbs/1000 sq ft./24 hours [ASTM F-1869] and a maximum *in situ* RH of 80% [ASTM F-2170]. The sub-floor pH must be 7.0- 9.0 [ASTM F-710]:

- a. Concrete (clean and fully cured)
- b. Asphalt paving (clean and fully cured)
- c. Other clean, sound paving surfaces
- d. Fiberglass\*
- e. Aluminum\*
- f. APA rated underlayment and marine grade plywood

**Note:** Aluminum surfaces must be sanded before adhering floorcovering to remove aluminum oxide which will weaken the bond. Aluminum and steel surfaces must be cleaned with a mild solvent (naphtha or mineral spirits) before applying the adhesive to remove oils or greases. When used over rubber roof coatings, a permanent bond is formed. Fiberglass surfaces must be sanded and vacuumed. Make sure to thoroughly clean fiberglass surfaces with denatured alcohol or methanol cleaner and let dry. AAT-390 is NOT for use on pressure-treated wood. \*Clean and abraded to provide for a mechanical bond.

#### Technical Data:

- A. Base: copolymer
- B. Color: White
- C. Freeze-Thaw Stable to 15°F. Frozen material should be allowed to thaw at room temperature. DO NOT agitate or stir while frozen. Stability and spread-ability can be reduced if frozen. For best results, do not allow the adhesive to freeze.
- D. Clean-up: wet adhesive with warm water, dry adhesive with AAT-197 Adhesive Remover
- E. Sizes: 1 gallon and 4 gallon pail
- F. It is essential that good adhesive contact be achieved. A 100% transfer of floor adhesive into the carpet backing while maintaining full coverage of the sub-floor must be obtained. On stiff backings or on backings that have curling tendencies, the flooring should be laid into the adhesive immediately after spreading and laid open for no more than 30 minutes before reapplying to the sub-floor. This method insures adhesive transfer to improve installation results.

#### Typical Trowels and Approximate Coverage Rates:

| <u>Carpet</u>           | <u>Sheet Vinyl</u>         |
|-------------------------|----------------------------|
| 1/8 x 1/8 x 1/8 V-Notch | 1/16 x 1/16 x 1/16 V-Notch |
| 108 sq. ft. /gal        | 180 sq. ft. /gal           |

#### Installation Recommendations:

*Prior to the start of the installation the installer must determine that the job-site conditions meet or exceed all applicable standards of the carpet/turf manufacturer and AAT. The sub-floor should be prepared according to the standards and practices set forth in the latest version of document ASTM F-710.*

1. Sub-floor surface must be sound, smooth and free of loose paint, varnish, curing agents, parting compounds, oil, grease, wax or any other foreign agents or contaminants that could affect the adhesive and bond strength.
2. Minimum environmental conditions are 65°-90°F and 35%-65% relative humidity for both the floorcovering and adhesive for not less than 48 hours before installation. These conditions should be maintained as the adhesive cures. Normal cure time is 24-48 hours, depending on temperature and relative humidity.

3. Spread the AAT-390 using the specified trowel. Allow the adhesive to tack properly (10-15 minutes) maintaining the proper notch throughout the entire installation.
4. Lay floorcovering into the adhesive so as to minimize air bubble and wrinkles. Roll the floorcovering with a 50-75 lb three section roller in both north - south and east - west directions. Check a small area for 100 percent transfer.
5. Keep the installation dry and at room temperature while curing. Exposure to water or rain will wash away the uncured adhesive. Fully cured adhesive is water resistant.
6. Clean up tools or adhesive spills with water while wet. Use AAT-197 Adhesive Remover or safety solvent if the adhesive has dried.

March 8, 2017 [replaces October 5, 2015]



## Safety Data Sheet

Print Date: May 13, 2015

## 1. Identification

- **Product Name:** AAT-390
- **Product Use:** Marine and Exterior 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-390

## 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:**  
CO<sub>2</sub>, 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

**Boiling 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 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:**

|                                                                     |
|---------------------------------------------------------------------|
| • <b>IARC (International Agency for Research on Cancer)</b>         |
| None of the ingredients is listed                                   |
| • <b>NTP (National Toxicology Program)</b>                          |
| None of the ingredients is listed                                   |
| • <b>OSHA-Ca (Occupational Safety &amp; Health Administrations)</b> |
| 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

|                                                                                  |                                                                                                            |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| • <b>Un-Number</b>                                                               |                                                                                                            |
| • <b>DOT, ADR, AND, IMDG, IATA</b>                                               | Not regulated                                                                                              |
| • <b>UN proper shipping name</b>                                                 |                                                                                                            |
| • <b>DOT, ADR, AND, IMDG, IATA</b>                                               | Not regulated                                                                                              |
| • <b>Transport Hazard class (es)</b>                                             |                                                                                                            |
| • <b>DOT, ADR, AND, IMDG, IATA</b>                                               |                                                                                                            |
| • <b>Class</b>                                                                   | Not regulated                                                                                              |
| • <b>Packing group</b>                                                           |                                                                                                            |
| • <b>DOT, ADR, IMDG, IATA</b>                                                    | Not regulated                                                                                              |
| • <b>Environmental hazards:</b>                                                  | Not applicable                                                                                             |
| • <b>Special precautions for user</b>                                            | Not applicable                                                                                             |
| • <b>Transport in bulk according to Annex II of MARPOL73/45 and the IBC Code</b> | Not applicable                                                                                             |
| • <b>Transport/Additional information:</b>                                       | DOT, ADR, IMDG, IATA – Not regulated in transport.<br>Not dangerous according to the above specifications. |
| • <b>UN “Model Regulation”:</b>                                                  |                                                                                                            |

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

## 15. Regulatory information

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 known 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

• **Carcinogenicity 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