

# **SAR 5000**

# **Premium Universal Pressure Sensitive Adhesive**

### **DESCRIPTION**

SAR 5000 Premium Universal Pressure Sensitive Adhesive is formulated for the installation of dimensionally stable LVT & LVP (including foam-backed tile and plank), carpet tile (including PVC and olefin-backed), VCT, Stone composite vinyl tile, bio-based tile, recycled/crumb rubber underlayment, fiberglass-backed sheet flooring and vinyl backed resilient sheet flooring. SAR 5000 is CRI Green Label Plus Certified, and is SCAQMD 1168 compliant.

### **Key Features and Benefits**

- Ultra-aggressive pressure sensitive adhesive
- · High tack and robust adhesion
- Immediate foot traffic after PSA method installation
- · Moisture tolerance on concrete up to 99% RH
- · Long working time-Up to 12 hours
- Ideal for LVT/LVP—including difficult foam back planks
- · Also bonds carpet tile, VCT, and vinyl sheet goods
- · Suitable for light & heavy commercial and healthcare
- Low VOC

### **Packaging**

1 gallon plastic pail (3.78 L) 4 gallon plastic pail (15.13 L) Product #12345678 Product #10013304

#### Coverage

Determine recommended trowel size based on flooring type. Coverage will vary with the absorption of substrate and trowel size. Figures below are presented only as guidelines.

Substrate/Flooring Type	Recommended Trowel Size	Approximate Coverage*
Porous substrates	<sup>1</sup> / <sub>16</sub> " x <sup>1</sup> / <sub>16</sub> " x <sup>1</sup> / <sub>16</sub> " (1.6 x 1.6 x 1.6 mm) Square-notch trowel	125-175 ft²/gal. or 14-20 yd²/gal. (12-16 m²/3.78 L)
Non-Porous substrates	$^{1}/_{16}$ " x $^{1}/_{32}$ " x $^{1}/_{32}$ " (1.6 x 0.8 x 0.8 mm) U-notch trowel	175-250 ft²/gal. or 19-28 yd²/gal. (16-23 m²/3.78 L)
Cushion-Backed or Fiber Glass-Backed Sheet Vinyl / Smooth- Backed Vinyl or Non-PVC Carpet Tile	³/8" Nap roller	250-350 ft²/gal. or 27-38 yd²/gal. (23-32 m²/3.78 L)

<sup>\*</sup>If recommended spread rate is exceeded, a loss of bond may occur.

# **Suitable Substrates**

- Concrete
- Cork Underlayment
- Gypsum substrates (properly primed) with minimum tensile bond strength of 72 psi (0.5 MPa)
- APA Grade Trademarked Exposure 1 Plywood Underlayment grade or better
- Terrazzo
- Fiber Cement Underlayment
- · Radiant Heated Subfloors
- Well bonded, smooth, wax-free, existing single layer noncushioned resilient flooring

#### Substrate Preparation (In accordance with ASTM F710)

Follow flooring manufacturer's guidelines for allowable levels of concrete moisture content. All materials should be stored at 50°F (10°C) to 90°F (32°C) 24 hours prior to installation. It is required that all surfaces be structurally sound and free from any contaminants that may inhibit bond, including oil, grease, dust, loose or peeling paint, sealers, floor finishes, curing compounds or contaminants. Existing adhesive must be removed by mechanical means, such as shot blasting or scarification. Be sure to use proper safety equipment for hazardous materials as old cutback adhesive may contain asbestos. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Consult all applicable government agencies for rules and regulations concerning the removal of floorings and adhesives that contain asbestos. Do not use solvents or liquid adhesive removers. Fill all cracks and depressions with a suitable cementbased floor patch and/or underlayment. Best practices for cleaning typically include vacuuming and damp mopping. Install only when the substrate temperature is between 50° and 90°F (10-32°C). Concrete substrate must be cured at least 28 days and prepared in accordance with ASTM F710. All concrete slabs must have an intact vapor barrier per ASTM E1745.

Moisture tests are required on concrete subfloors. Moisture testing should be performed by ASTM F2170 In Situ Relative Humidity Test with readings not to exceed ninety-nine (99) percent or ASTM F1869 Calcium Chloride Test with MVER not to exceed twelve (12) lbs. per one thousand (1,000) square feet per twenty-four (24) hours. The maximum pH levels should not exceed a reading of 12.

Although SAR 5000 is a moisture tolerant adhesive, it does not form a moisture vapor barrier and will not protect flooring from moisture damage. Use of a moisture mitigation product may be required for higher moisture content concrete.

The substrate, adhesive and flooring must be acclimated in an enclosed building with the HVAC operational between 60-90°F (15-35°C) and between 30-65% relative humidity for at least 72 hours before, during and after the installation.

Alkalinity Test: Concrete alkalinity testing must be performed in accordance with ASTM F710. Confirm the acceptable range for the flooring per the manufacturer's guidelines. A reading outside of either range requires corrective measures before flooring installation. Always follow flooring manufacturer's guidelines for acceptable levels of alkalinity for the vinyl flooring.

Porosity Test: Substrate porosity testing must be performed in accordance with ASTM F3191. First prepare the substrate to a clean, sound condition, free of any matter that would interfere with a good bond. To test porosity, place a drop of water on the substrate surface in several places; if the water is absorbed into the surface within 60 seconds, the surface is porous; if not, the surface is nonporous. If the water is absorbed into the surface in less than 10 seconds, an application of primer is mandatory before the application of adhesive because the substrate is very porous. Follow PDS instructions for the primer application, then follow the specific adhesive installation instructions listed below.

### Storage

Store at a moderate room temperature. Protect adhesive from freezing.

### **Shelf Life**

Maximum of 2 years from date of manufacture in properly stored, unopened container.

# **SAR 5000**

# **Premium Universal Pressure Sensitive Adhesive**

#### Limitations

- Do not apply over sealed concrete, tempered hardboard (e.g. Masonite), particle board, or lauan plywood.
- · For interior installations only.
- Flooring must be acclimated per manufacturer's instructions.
- Do not install when the concrete RH is over 99%, per ASTM F2170.
- Do not install when MVER is over 12 lbs. per 1,000 ft<sup>2</sup> per 24 hours, per ASTM F1869.
- Do not install when the pH is greater than 12.
- Install only when the substrate temperature is between 50° and 90°F (10°-32°C).
- Do not install into wet adhesive over nonporous substrates.
- · Do not apply over adhesive residues.
- The dimensional stability of some vinyl flooring is very sensitive to fluctuations in ambient environment conditions. SAR Floors is not responsible for installation issues caused by dimensional changes in flooring.
- · Not recommended for use on vertical surfaces.

#### **Cautions**

Read complete cautionary information printed on product container prior to use. For medical emergency information, call (512) 503-2106

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered SAR Floors brand product(s) under normal environmental and working conditions. Because each project is different, SAR Floors cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

# **TECHNICAL DATA**

# **Physical Properties**

SAR 5000 Premium Universal Pressure Sensitive Adhesive		
Description		
Base Polymer	Acrylic Polymer	
Color	Light Straw	
VOC Content	<1 gram per liter	
рН	7.25	
Consistency	Paste	
Shelf Life	Maximum of 2 years from date of manufacture in properly stored, unopened container.	
Storage	40°-95°F (4°-35°C)	
Application Temperature	50°-90°F (10°-32°C)	
Traffic Restrictions	Foot Traffic after 12 hours and Heavy Traffic after 24 hours for Semi-Wet Set. Light Foot Traffic allowed immediately after rolling and Heavy Traffic after 12 hours for PSA Method.	
Open Time	Up to 12 hours depending on porosity and environmental conditions	
Freeze/Thaw Stability	5 cycles at 20°F (-7°C)	

## INSTALLATION INSTRUCTIONS

## **Application**

1. Refer to all manufacturer's recommendations and approvals prior to installation.

**Product Data** 

- 2. For Indoor Use Only.
- 3. Read this Product Data Sheet and SDS thoroughly prior to installation.
- 4. For best results, install at 70°F [21°C] (+/- 5°) and 50% R.H. (+/- 5%).
- 5. For proper trowel or roller selection please see Coverage section in this document.
- 6. Spread adhesive using the recommended trowel or roller.
  - PSA Method (Porous and Non-Porous Substrates).
    - Allow spread adhesive to dry for 30-60 minutes or until adhesive is clear and does not transfer to fingertips when lightly touched.
    - Install flooring within 12 hours. Protect open adhesive from dust and debris.
  - Semi-Wet Set Method (Porous Substrates Only). Will result in a permanent installation and limited repositionability.
    - Allow spread adhesive to partially dry for 10-15 minutes, then install flooring.
    - Working time is approximately 20-30 minutes depending upon conditions.
- 7. Within 1 hour of placing flooring into the adhesive you must roll and cross roll the floor with a 100 lb. three-section roller to assure adhesive has made proper contact with the flooring.
- 8. Heat welding may be performed as soon as 60 minutes provided the following steps are done: Always back-roll the trowel applied adhesive (using a well saturated roller) immediately following the adhesive application process; Always wait 1 hour or until the adhesive transitions from wet to tacky (no transfer when lightly touched) before the placement of the flooring. Ambient conditions will dictate this proper transition period.

NOTE: These two steps are imperative to prevent adhesive reemulsification and bleed through during the heat welding process, resulting in a failed weld.

Note: It is the sole responsibility of the installer to determine the suitability and compatibility of the adhesive for the intended application.

# Clean-up

Remove wet adhesive immediately with a damp cloth. Use Mineral Spirits to remove dried adhesive. CAUTION: Mineral Spirits are flammable. Read and follow all precautions on container label.

## LIMITED WARRANTY

This product is sold subject to a Limited Warranty and related terms. North Star Flooring disclaims the implied warranties of merchantability and fitness for a particular purpose and all incidental and consequential damages arising out of the sale, purchase or use of this product. For Limited Warranty details or to obtain a hard copy of the Limited Warranty visit northstarflooring.





