

ESDvantage Adhesive Product Data Sheet

DESCRIPTION

ESDvantage is a solvent-free, acrylic conductive adhesive formulated to install conductive and static dissipative <u>ESD carpet tiles</u> provided by United Static Control Products. To insure product stability and reduce joint openings, ESDvantage has been formulated to produce a firm bond line less susceptible to indentation and telegraphing. This product may be used over properly prepared porous and non-porous surfaces such as concrete, underlayment grade plywood, raised access floor panels, cementitious based patching compounds and levelers.

BENEFITS

- Non-Flammable
- Solvent-free
- Excellent moisture and alkali resistance
- Excellent plasticizer resistance
- In bucket anti-microbial protection
- When dry, does not promote growth of mold or mildew
- Low odor
- Easy to trowel
- Can be used for a tough permanent bond or releasable /pressure-sensitive installation
- Easy clean up

TESTING METHODS

- Freeze-thaw stability (ASTM D7149)
- Shelf Life (ASTM D1337)
- Adhesive Shear Strength (ASTM D6004)
- 90° Peel Resistance (ASTM D6862)
- Plasticizer Resistance (ASTM D7888)
- Caster Chair (ISO 4918)
- Heat Aged Expansion/Contraction

TECHNICAL DATA

Electrical

Resistance: $\leq 1.0 \times 10^6 \text{ Ohms}$

Weight/Gal: 8.5 lbs.

Color: Off-white with gray fibers

VOC: <1 gram/liter per SCAQMD Rule 1168

Shelf Life: 1 year in unopened container

Freeze-thaw: 4 cycles @ 0° F. If adhesive has frozen,

thaw under normal room temperature.

PACKAGING

ESDvantage is available in 1-gallon and 4- gallon pails.

STORAGE AND SHELF LIFE

Adhesive shall be stored in a dry, climate-controlled area. Shelf life is one year from date of manufacture in unopened, properly stored containers.

COVERAGE

For non-access floor installations:

Trowel	Spacing	Coverage
y We man as as Yee X Wee	1/16" x 1/16" x 1/16" Square Notch	Approximately 200-225 square feet per gallon

For access floor installations:

Foam roller	Coverage
1/4" foam roller	Approximately 400-450 square feet per gallon

ACCLIMATION

The area to receive flooring shall be fully enclosed, weather tight, with an installed operating HVAC system. The installation area, flooring materials and adhesive must be acclimated at a temperature between 65°- 85°F for 48 hours prior to, during and after installation. The relative humidity of the installation area shall be maintained between 35-55% per ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring).

SURFACE PREPARATION

ESDvantage can be used on porous and non-porous surfaces free of moisture. Surface to be covered must be dry, clean and smooth. Any foreign materials present such as paint, grease, oil, pen markings, adhesive residues, etc. that may prevent a proper bond or migrate to the surface causing a stain must be removed. Adhesive can be used on all grades of concrete on, above or below grade in the absence of moisture. Installation of a 10 mil (0.010") or greater effective moisture retarder is recommended directly under all on and below grade concrete floors with its integrity insured. Concrete shall be prepared according to the recommendations outlined in ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete floors shall be free from crazing, dusting, spalling and any curing or sealing compounds. Concrete floors shall be tested for moisture according to the latest revision of ASTM F2170 Standard Test Method for Determining Relative

Humidity in Concrete Floor Slabs Using in situ Probes with levels **not to exceed 85%RH** and ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride with moisture levels **not to exceed 5 pounds** per 24 hours per 1,000 square feet. **Substrate PH reading should be between 7.0 and 10.0.** Wood floors must be double construction with a 1" minimum thickness, structurally sound, securely fastened and free from deflection/spring. Top layer of wood shall be underlayment grade (AC) plywood. Cracks and uneven surfaces must be filled with an approved cement-based patching compound.

GROUNDING

Install ground strips or grounding hardware prior to beginning floor covering installation. See specific flooring product's installation instructions for details.

APPLICATION

Non- access floor installations: Apply adhesive evenly with a 1/16" x 1/16" x 1/16" square notch trowel. Hold trowel at a 60° angle. Replace trowels with worn notches. Do not re-notch worn notches.

Note: When troweling adhesive, avoid excess build-up of fibers on trowel blade, as this can affect the static dissipative or conductive properties of the flooring installation. If excess fibers build up on the trowel, discard the adhesive on the trowel. Do not return the adhesive to the bucket.

Access floor installations: Apply adhesive evenly with $\frac{1}{4}$ " foam roller. The adhesive should be poured onto the access floor panels in small amounts and rolled to achieve complete coverage. Care should be taken to ensure moderately even distribution of fibers. Do not force adhesive into panel gaps.

Porous Substrates: For permanent applications, flooring material shall be positioned while adhesive is wet. The adhesive shall be allowed to remain open or flash-off for approximately 5-10 minutes before positioning flooring. The working time of the adhesive will be dependent upon substrate porosity, room temperature and humidity.

For releasable applications, the adhesive must be allowed to dry to the touch. Dry time will be dependent upon substrate porosity, room temperature and humidity. From the time the adhesive dries to the touch, to the time it must be covered with flooring is approximately one-hour. If the adhesive remains uncovered longer than the recommended one-hour a loss in adhesion strength may result. The installer should not spread more adhesive than can be covered with flooring within the one-hour timeframe.

Non-Porous Substrates: The adhesive must be

allowed to dry to the touch. Dry time will be dependent upon substrate porosity, room temperature and humidity. From the time the adhesive dries to the touch, to the time it must be covered with flooring is approximately 45 minutes. If the adhesive remains uncovered longer than this recommended time a loss in adhesion strength may result. The installer should not spread more adhesive than can be covered with flooring within the 45 minute time frame.

Roll the entire installation with a 75 lb. or greater roller after installation.

CLEAN-UP

Remove wet adhesive from flooring and tools with soapy water and a clean cloth. Use mineral spirits to remove dried adhesive. Do not apply solvents directly to flooring. Use caution when handling flammable solvents.

POST INSTALLATION

For permanent bond installations, prevent all traffic for a minimum of 24 hours. Restrict heavy traffic and rolling loads for a minimum of 72 hours after installation. Do not wash or begin maintenance procedures on the floor for a minimum of 5 days after. Releasable bond carpet installations may be used immediately after installation.

GENERAL WARRANTY

United SCP warranties its adhesive formulations to be free of all manufacturing defects. The warranty period shall be in place for one (1) year from the date of installation and will also be guided by the date of manufacture to insure the integrity of the formulation and that proper storage and shipment of same has taken place.

PRECAUTIONS

Carefully read and follow all precautions and warnings. Carefully read and follow installation instruction specific to the floor covering being installed with this adhesive. Keep out of reach of children. For complete safety information, refer to Safety Data Sheet (SDS) available from United SCP, Inc.

QUESTIONS/ASSISTANCE

Help with questions, assistance or additional information can be found by Visiting http://unitedscp.com or by calling our customer support number at 719 676 3928 (extension 7000) or by email at techsupport@ultrastatinc.com