DESCRIPTION

A vinyl compatible, acrylic-based, floor covering adhesive specially formulated to install vinyl composition tiles, solid vinyl tile, all types of carpet tile and approved under cushion pad in a double glue down application. Can be brush, roller, spray or trowel applied. Floor covering can be installed using either the wet or dry installation method. The adhesive is colored BLUE for easy field identification.

USES

1. For the installation of vinyl composition tile, solid vinyl tile and vinyl backed carpet.
2. For the releasable installation (dry method) of carpet tile. A permanent bond will result if tile is installed into wet adhesive.
3. Consult Shaw’s Technical Services Department for a list of approved cushions.

LIMITATIONS

1. For interior installations only.
2. Do not use for the installation of rubber sheet goods or rubber tile.
3. Do not use when the substrate temperature is below 50°F (10°C) or above 90°F (32°C), or when relative humidity exceeds 65%.
4. Do not apply directly over gypsum-based substrates.

RECOMMENDED SUBSTRATES

• Any wood underlayment that is recommended or guaranteed by either the wood underlayment manufacturer or the floor covering manufacturer, such as Exterior grade plywood, Group 1, CC type.
• Fully cured concrete.
• Properly prepared cement terrazzo.
• Properly prepared existing vinyl composition tile (limited to one layer).
Note: It is recommended that all concrete slabs be tested for moisture. If moisture vapor emission exceeds 5-lbs./1000 sq. ft. (1,36 kg/92,9 m²) per 24 hours, using the anhydrous calcium chloride test, this adhesive must not be used.

SETTING INSTRUCTIONS

1. SURFACE PREPARATION
SEE “SURFACE PREPARATION” SHEET.
2. MIXING
ECO 800 is ready to use. No mixing is required. Simply open the container and spread.

3. APPLICATION
Note: Shaw 5100 may brush, roller, spray or trowel applied.
3.1 Use the floor covering manufacturer’s recommended notched trowels (see technical data table) or application technique.
3.2 Spread adhesive using the recommended trowel or application technique. Spread enough adhesive to ensure that at least 90% of the adhesive transfers to the flooring material backing.
Use the dry installation method in tile over tile applications and for installations requiring releasability (carpet tile). If carpet tiles are installed into fresh adhesive, a permanent bond may result.
3.3 When installing floor covering requiring a permanent bond (vinyl backed carpeting), lay the material into the adhesive while it is still fresh.
3.4 Roll flooring surface backward across width and length with the manufacturer’s recommended roller, to break down adhesive ridges and to ensure removal of entrapped air.
3.5 Complete installation as per flooring manufacturer’s instructions.
3.6 Promptly clean adhesive smudges from floor covering surface with water while adhesive is still fresh and with mineral spirits when dried.
3.7 Promptly wash tools and hands with water while adhesive is still fresh.
3.8 Do not wet wash floor for five days after tile installation is completed.

4. EXPANSION AND CONTROL JOINTS
4.1 Provide for expansion and control joints where specified.
4.2 Do not cover any expansion joints with adhesive.
4.3 Cut flooring material on both sides along the edges of expansion joints.
4.4 Insert the specified compressible bead and sealant for expansion and control joints, according to plans and specifications.

Technical Data

Drying time at 72°F (22°C)  Up to 30 minutes (depending upon trowel used)
50% relative humidity  Freeze-thaw stability at 0°F (-18°C)  Stable 5 cycles
Flash point  Maximum tolerance of moisture vapor emission from the concrete slab (using the anhydrous calcium chloride test)  5 lbs. per 1000 sq. ft. (1,36 kg/92,9 m2) per 24 hours
Cleanability  pH Less than 8.0
Color  With water while fresh, with mineral spirits when dried.
Clear with blue tint
Consistency
Semi-liquid (low-moderate viscosity)

Packaging
Pails: 1 US gal. (3.7 L); 3.96 US gal. (15 L)

Shelf Life
12 months when stored in original containers at room temperature in a dry heated area.

Approximate Coverages
Typical Recommended Trowel (depth, width, space)
PVC Only Roller Applied
PermaBac, 3/16” Nap Roller 200 – 245 sq ft/US gal
Carpet Tile (rough backing/substrate) and pad to floor:
1/16” x 1/16” x 1/16” 125 - 185 sq. ft./US gal.
(1.6 x 1.6 x 1.6 mm) (3.0 - 4.5 m²/L)

Note
Quantities shown are approximate and given for estimating purposes only. Actual job site coverages may vary according to substrate conditions, type of trowel used and setting practices.

Health and Safety
Consult the material safety data sheet for more information.

5. PROTECTION
5.1 Protect containers from freezing in transit and storage. This product is freeze/thaw stable at temperatures down to 0°F (-18°C). However, it is recommended to protect all water-based products from freezing. If frozen, do not stir until material has completely thawed.
5.2 Provide for heated storage on site and deliver all materials at least 24 hours before work begins.
5.3 Restrict traffic for 24 hours to allow proper adhesive set-up.

NOTICE
We shall not be liable for incidental and consequential damages, as defined under the uniform commercial code, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instruction or for other than the intended use. Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was, or reasonably should have been discovered.
*** Section 1 - Chemical Product and Company Identification ***

Material Name: Shaw 5100
Product Use
   Flooring adhesive
Manufacturer Information
   USA and Puerto Rico
   MAPEI
   1144 East Newport Center Drive
   Deerfield Beach, FL 33442
   Phone: 1-954-246-8888

   Canada
   MAPEI
   2900 Francis-Hughes Avenue
   Laval, QC H7L 3J5
   Phone: 1-450-662-1212

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:
   (USA) CHEMTREC 1-800-424-9300
   (Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview
   This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard).
   Irritating to eyes. This product contains trace levels (<0.03%) of fungicides.

Hazard Statements
   CAUTION! IRRITANT. Irritating to eyes. Wear suitable gloves and eye/face protection. Keep out of the reach of children.

Potential Health Effects: Eyes
   This product is irritating to the eyes.

Potential Health Effects: Skin
   This product may cause irritation to the skin.

Potential Health Effects: Ingestion
   Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Potential Health Effects: Inhalation
   This product may cause irritation to the respiratory system.

Medical Conditions Aggravated by Exposure
   Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects
   None identified.

HMIS Ratings:
   Health: 1
   Fire: 1
   Reactivity: 0
   Pers. Prot.: Safety glasses, gloves

Hazard Scale:
   0 = Minimal
   1 = Slight
   2 = Moderate
   3 = Serious
   4 = Severe
   * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

<table>
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<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Acrylic Copolymer</td>
<td>60-100</td>
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<tr>
<td>31069-81-5</td>
<td>Acrylic Copolymer</td>
<td>1-5</td>
</tr>
</tbody>
</table>
**Section 4 - First Aid Measures**

*First Aid: Eyes*
Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.

*First Aid: Skin*
Wash affected area with mild soap and water. If irritation persists, get medical attention.

*First Aid: Ingestion*
For ingestion, flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

*First Aid: Inhalation*
If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If symptoms persist, get medical attention.

*First Aid: Notes to Physician*
Provide general supportive measures and treat symptomatically.

**Section 5 - Fire Fighting Measures**

*General Fire Hazards*
See Section 9 for Flammability Properties.
This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a slight fire hazard.

*Hazardous Combustion Products*
Irritating and/or toxic gases may be emitted upon the product's decomposition. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

*Extinguishing Media*
Dry chemical (preferred), foam, water.

*Fire Fighting Equipment/Instructions*
Firefighters should wear full protective gear.

*NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0*
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Section 6 - Accidental Release Measures**

*Personal Precautions*
Wear appropriate personal protection equipment.

*Containment Procedures*
Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

*Environmental Precautions*
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*Clean-Up Procedures*
Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up.

*Evacuation Procedures*
None identified.

*Special Procedures*
Regulations vary. Consult local authorities before disposal.

**Section 7 - Handling and Storage**

*Handling Procedures*
Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Use this product with adequate ventilation. Wash hands after handling and before eating. Keep out of the reach of children.
Storage Procedures
Store in a cool, dry, well-ventilated area. Keep the container tightly closed and dry. Do not freeze.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits
ACGIH, OSHA, NIOSH or the provinces of Canada have not developed exposure limits for any of this product's components.

Engineering Controls
Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/face
Wear safety glasses with side shields.

Personal Protective Equipment: Skin
The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory
Not normally needed. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General
Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance: Cream Colored Paste</td>
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</tr>
<tr>
<td>Odor: Slight acrylic odor</td>
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</tr>
<tr>
<td>pH</td>
<td>7.5 - 11</td>
</tr>
<tr>
<td>Vapor Pressure: N/A</td>
<td>Vapor Density: N/A</td>
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<tr>
<td>Boiling Point: N/A</td>
<td>Melting Point: N/A</td>
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<tr>
<td>Solubility (H2O): N/A</td>
<td>Specific Gravity: 1.1 - 1.5</td>
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<tr>
<td>Evaporation Rate: N/A</td>
<td>VOC: 19 g/L</td>
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<tr>
<td>Octanol/H2O Coeff.: N/A</td>
<td>Flash Point: &gt;200° F</td>
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<tr>
<td>Flash Point Method: N/A</td>
<td>Upper Flammability Limit</td>
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<tr>
<td>Lower Flammability Limit (LFL):</td>
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<tr>
<td>Burning Rate: N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto Ignition: N/A</td>
<td></td>
</tr>
</tbody>
</table>

Physical Properties: Additional Information
The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
This is a stable material.

Chemical Stability: Conditions to Avoid
Do not freeze.

Incompatibility
This product may react with strong acids or oxidizing agents.

Hazardous Decomposition
Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.
Material Safety Data Sheet

Material Name: Shaw 5100

Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects
A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50
No LD50/LC50's are available for this product's components.

Carcinogenicity
A: General Product Information
No information available for the product.

B: Component Carcinogenicity
None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Sensitization
No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity
A: General Product Information
No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity
No ecotoxicity data are available for this product's components.

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions
A: General Product Information
No additional information available.

B: Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions
Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

International Transportation Regulations
Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

US Federal Regulations
A: General Product Information
All components are on the U.S. EPA TSCA Inventory List. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis
None of this product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations
A: General Product Information
Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State
None of this product's components are listed on the state lists from CA, MA, MN, NJ, PA, or RI.
Material Name: Shaw 5100

Canadian WHMIS Information
A: General Product Information
Not regulated
B: Component Analysis - WHMIS IDL
No components are listed in the WHMIS IDL.

Additional Regulatory Information
A: General Product Information
Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.
B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
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<tbody>
<tr>
<td>Acrylic Copolymer</td>
<td>25586-20-3</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
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<tr>
<td>Acrylic Copolymer</td>
<td>31069-81-5</td>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Other Information
Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend
NA = Not available or Not Applicable. BLV=Biological Limit Values TLV = Threshold Limit Value. NFPA = National Fire Protection Association. HMIS = Hazardous Material Information System. CFR = Code of Federal Regulations. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

End of Sheet SAH00325