

# **Eco Bond LVT**

## TECH DATA -

#### **PRODUCT CHARACTERISTICS**

**TAJ Eco Bond LVT** spray adhesive is a versatile spray adhesive naturally suited for adhering approved Luxury Vinyl Tile, Luxury Vinyl Plank and Carpet Tile in commercial and residential applications.

It uses 80% less adhesive compared to trowel-applied epoxy and bucket adhesive. Its instant shear strength allows for all traffic without any adhesive indentation, displacement, or movement associated with heavy weight-bearing loads.

It is a non-toxic, 0.020 g/ml VOC product that allows occupation of space as soon as installation is complete.

#### **ADVANTAGES**

- Uses 80% less adhesive
- Allows all traffic immediately
- 0.020 g/ml VOC content
- Non-toxic, water-based adhesive
- $\boldsymbol{\cdot}$  No need to shut down HVAC
- Easy water cleanup while adhesive is still wet
- Non-flammable
- High moisture and pH resistant
- No offensive odors

### COVERAGE

For approved LVT, LVP and Carpet Tile in an upside down aerosol can.

150-185 sq ft per can

### SUITABLE SUBSTRATES

**TAJ Eco Bond LVT** spray adhesive bonds approved LVT, LVP and Carpet Tile to the following properly prepared, smooth, flat, dust-free substrates:

- Concrete
- Underlayment grade plywood
- Metal
- Fiberglass
- Existing VCT

#### **TECHNICAL CHARACTERISTICS**

- Provides immediate shear strength after installation allowing instant access to finished floor.
- Solvent free, emits no harmful fumes, and contains 0.020 g/ml VOC (Volatile Organic Compounds) in content, according to EPA Test Method 8260B.
- Uses non-ozone depleting HFC propellant.
- Withstands 8 lbs. of vapor emissions, 90% RH and 11 pH.



\*According to EPA document: "National Volatile Organic Compound Emission Standards For Consumer Products" for aerosol adhesives.

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CHEMICAL TYPE	Water-based acrylic blend
APPEARANCE	Milky white frost bubbles
ODOR	Sweet mild odor
FLASH POINT	Will not burn
NFPA 704 FLAMMABILITY RATING	0 (Non-flammable)
SHELF LIFE	3 years, if unopened
OPEN TIME	4 hours
DRY TIME	Once adhesive is dry to touch (10-20 minutes)
VOC CONTENT	0.020 g/ml calculated per EPA Test Method 8260B
FOOT TRAFFIC ALLOWANCE	Immediately
HEAVY MACHINERY ALLOWANCE	Immediately
RESISTANCE TO MOISTURE	Excellent: 8 lbs/1,000 sq ft or 90% RH/11pH
UNDERFLOOR HEATING SYSTEMS	Yes
STORAGE	Do not subject to freezing temperatures



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REV: Release DATE: 9.6.16

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## Installation Instructions: TAJ LVT Vinyl Planks and Tiles

Recommended Adhesive: TAJ Eco Bond Spray Adhesive / TAJ 585 Adhesive

#### Job Conditions:

The installation of flooring shall proceed only after the work of other trades has been completed especially overhead trades. Areas to receive Resilient flooring shall be clean, adequately lighted, fully enclosed, weather tight, and heated to a minimum of 65° to 70° F. for 72 hours before, during, and after installation is completed. Heat should be maintained in areas to receive flooring with the building's permanent heating system. Salamanders and other temporary heating devices should not be used. Flooring installed with TAJ 585 adhesive shall not be exposed to heavy traffic or heavy rolling loads for 24 hours following completion. No maintenance procedures should take place until the adhesive has cured for a minimum of 72 hours. Eco Bond adhesive allows immediate foot traffic. If emergency conditions require the movement of equipment or furniture, the flooring should be protected with heavy planks or a minimum of 1/2" thick plywood to prevent damage.

NOTE: Flooring and adhesives should be on site a min. of 24 hours prior to installation allowing materials to acclimate.

#### Suitable Substrates:

**Concrete Substrate:** Concrete substrate shall conform to requirements of ASTMF-710-05-Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring).

Concrete subfloors shall be steel troweled finished smooth, flat and level. Concrete shall be wet cured for a minimum of 30 days to 3,500 psi. Flatness of concrete shall be  $\pm$  1/8 in a 10'-0" radius. Do not apply any type of coatings, surface sealers, hardeners, or curing membranes to the surface of the concrete. These materials will prevent proper bond of the floor covering adhesive. Minor cracks, chips, and spalls shall be patched with cement based patching material, i.e. Ardex or Mapei. Level high spots by grinding or sanding. Any required leveling shall be done with cement-based underlayment, minimum 3,500 psi, i.e., Ardex or Mapei. Patching and underlayment material shall be applied in strict accordance with manufacturer's specifications and installation instructions.

- **TAJ Eco Bond Adhesive**: Maximum 8.0 lbs. of moisture per 1,000 s.f. per 24 hours as tested by calcium chloride Test kits per R.M.A. test procedure. Test pH of concrete pH shall be <11 and a maximum RH of 90%.
- **TAJ 585 Adhesive:** Maximum 5.0 lbs. of moisture per 1,000 s.f. per 24 hours as tested by calcium chloride test kits per R.M.A. test procedure. Test pH of concrete pH shall be <9 and a maximum RH of 80%.

If the concrete is contaminated with any type of sealer, hardener, curing membrane, paint, oil, grease, adhesives, and any other type of penetrating material it should be removed thoroughly by bead blasting. Sanding is not adequate and chemicals should not be used to accomplish removal. After concrete preparation has been completed, sweep and vacuum surface thoroughly to remove all miscellaneous dirt and contaminants.

It is possible that joints of existing resilient flooring may telegraph through tiles. This is a common occurrence and is not a product defect.

#### Unsuitable substrates:

Particleboard, chipboard, flake board, hard board, soft or lightweight aggregate concrete or gypsum underlayment are not the most suitable substrates for installation of vinyl flooring and must use only Eco Bond Adhesives under ideal circumstances only. Minimum 3/8" thick APA graded plywood, properly installed, is a suitable underlayment. Contact us for recommendations regarding all other types of substrates.

#### **Hospital Beds:**

In the event that LVT is to be used in patient rooms the area under the beds must be installed using the recommend Eco Bond Adhesive System. (no substitutions) This adhesive will tolerate point loads within 4 hours of installations.

#### Layout:

Establish chalk guidelines, which are at right angles to each other from which the tile/planks are to be laid. Measure the area to find the best starting point for maximum size perimeter cuts.

#### Installation:

Before beginning Installation check actual boxes of all tiles/planks to be sure that correct color, pattern, and quality has been shipped for your specific installation. Do not mix dyelots in the same area.

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#### Installation Instructions: TAJ LVT Vinyl Planks and Tiles Recommended Adhesive: TAJ Eco Bond Spray Adhesive / TAJ 585 Adhesive

- Observe wearing surface and back of all tiles or planks to be sure there is no damage or defects. Do not install or
  glue tile with visible defects. Tiles or planks that may have minor defects on one side or at edges can be used for
  trimming and fitting at walls and columns.
- Lay tiles or planks starting at the center of the room working towards the walls. Lay out following the directional arrows on back of tiles.
- The perimeter tile or planks must be cut up to the wall from the field tile or plank. The perimeter tile or planks should be accurately scribed against the wall and any projections coming out from the walls. Cut product from the face side with a sharp knife. Do not jam tiles. Keep foot traffic off laid area while installing to prevent shifting.
- Install Tajima LVT tile with Eco Bond LVT adhesive system or TAJ 585 adhesive using a 1/16" x 1/16" x 1/16" square notched trowel. For non-porous sub-floors, use a 1/16" x 1/16" x 1/16" V notched trowel.
- If using acrylic trowel on adhesive, immediately after spreading, roll it with a short nap roller dampened with adhesive to flatten the adhesive ridges. This procedure will expedite the set up time and ensure the trowel notch pattern does not telegraph through to the finished floor. When using the "wet-set" method of installation test the adhesive to see if it has "strings" and is moist to the touch before installing the floor covering. Check periodically to make sure there is full transfer of adhesive to the back of the flooring covering.
- Please note complete instructions on adhesive containers.
- All corners of tile or planks shall be butted, not staggered. Planks are to be staggered for uniform and natural look. Square tiles will have an arrow on the back of the tile or a line. The square tiles should be installed with the arrow or lines at 90 degree angles to each other in order to accomplish uniformity of color and pattern. Layout tile or planks loosely a minimum of 15 to 20 tiles or planks, to verify uniformity of color and pattern.
- If the tile or planks cannot be installed with a uniform appearance, do not continue the installation. Contact us for assistance.
- Fit tile or planks carefully and neatly to all pipes, columns and other obstructions without voids, especially where there will be no base installed.
- Within one hour after installation, roll the tile or planks thoroughly in both directions with a 100-pound roller, to properly seat the tile or planks into adhesive. Check tiles two to three hours later and roll again.
- Fit tile or planks properly at walls. Do not over-fit tile or planks as that will cause them to buckle.
- During installation, remove any spilled adhesive or adhesive that may be squeezed through joints with a clean
  white rag dampened with soapy water. If adhesive has set prior to removal with a damp rag, it can be removed
  with mineral spirits solvent.
- Foot traffic is allowed after installation is completed, but heavy traffic should be not allowed for 24 hours if using TAJ 585 adhesive.
- Floor surface should not be cleaned until 72 hours after installation is completed when using the TAJ 585 adhesive – or 4 hours if using Eco Bond LVT adhesive system.

#### Protection:

- The floor is designed to properly support a static load of 1100 psi. Furniture, equipment, and rolling loads should not exceed these limits. If they do, legs of such equipment and furniture should be properly supported to prevent damage to tile or planks. Protect floor surface with wood or sheets of plywood whenever heavy equipment or furniture must be moved
- 2. Chair pads are recommended under chairs with roller casters.
- 3. Felt pads are recommended under chairs with sharp or unprotected edges to prevent scratching.



 Safety Data Sheet

 according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

 Date of issue: 05/05/2015
 Revision date: 08/26/2016
 Version: 1.0

Product identifier           Product name           Product code	substance/mixture and of the comp	party/undertakin	
Product name			
	: TAJ Eco Bond LVT		
	: Not available		
C Delevered talend/file days and files		1	
	substance or mixture and uses advised aga	unst	
Jse of the substance/mixture	: Adhesive		
1.3. Details of the supplier of the sat	ety data sheet		
TAJ Flooring, Inc. 740 Church Road Elgin, IL 60123 - USA			
Г 847-690-9930			
1.4. Emergency telephone number			
Emergency number	: CHEMTREC: 1 (800) 424-9300		
SECTION 2: Hazards identificatio	n		
2.1. Classification of the substance			
GHS-US classification			
Gases under pressure – Liquefied gas Carcinogenicity 2			
2.2. Label elements			
GHS-US labelling			
	GHS04 GHS08		
Signal word (GHS-US)	: Warning		
Hazard statements (GHS-US)	: Contains gas under pressure; may ex	plode if heated. Susp	ected of causing cancer.
Precautionary statements (GHS-US)	<ul> <li>Obtain special instructions before use and understood. Wear protective glov exposed or concerned: Get medical a Store in a well-ventilated place. Dispo regional, national and international regional</li> </ul>	es/protective clothing dvice/attention. Store use of contents and co	y/eye protection/face protection. If locked up. Protect from sunlight.
2.3. Other hazards			
No additional information available			
2.4. Unknown acute toxicity (GHS-U	S)		
None			
SECTION 3: Composition/informa	ation on ingredients		
3.1. Substance			
Not applicable			
3.2. Mixture			
Name	Product identifier	%	GHS-US classification
1,1-Difluoroethane	(CAS No) 75-37-6	10 - 30	Flam. Gas 1
Vinyl acetate	(CAS No) 108-05-4	0.1 - 1	Liquefied gas Flam. Liq. 2 Acute Tox. 4 (Inhalation) Carc. 2 STOT SE 3

\* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

4.1.	Description of first aid measures	
	I measures after inhalation	: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,
li st-aiu		give oxygen.
First-aid	I measures after skin contact	: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
First-aid	I measures after eye contact	: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. irritation persists, get medical attention.
First-aid	I measures after ingestion	: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.
4.2.	Most important symptoms and eff	ects, both acute and delayed
Symptor	ms/injuries after inhalation	: May cause respiratory tract irritation.
Symptor	ms/injuries after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the ski
Sympto	ms/injuries after eye contact	<ul> <li>May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.</li> </ul>
Sympto	ms/injuries after ingestion	: Not a normal route of exposure.
4.3.		al attention and special treatment needed
Symptor	ms may not appear immediately. In case	e of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possib
SECT	ION 5: Firefighting measures	
5.1.	Extinguishing media	
Suitable	e extinguishing media	: Powder, water spray, foam, carbon dioxide.
Unsuital	ble extinguishing media	: None known.
5.2.	Special hazards arising from the s	ubstance or mixture
Fire haz		: Products of combustion may include, and are not limited to: oxides of carbon.
5.3.	Advice for firefighters	
	ting instructions	: Cool closed containers exposed to fire with water.
-	on during firefighting	: Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
SECT	ION 6: Accidental release me	asures
6.1.	Personal precautions, protective	equipment and emergency procedures
General	measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocke
6.2.	Methods and material for contain	nent and cleaning up
For cont	tainment	<ul> <li>Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).</li> </ul>
Methods	s for cleaning up	: Scoop up material and place in a disposal container. Provide ventilation.
6.3.	Reference to other sections	
See sec	ction 8 for further information on protec	ive clothing and equipment and section 13 for advice on waste disposal.
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precauti	ions for safe handling	Keep away from sources of ignition No smoking. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Use only in well-ventilated areas. When using do not eat, drink or smoke. Pressurized container: Do not pierce or burn, even after use.
Hygiene	e measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2.	Conditions for safe storage, inclu	ding any incompatibilities
Storage	conditions	Keep locked up and out of reach of children. Store away from direct sunlight or other heat sources. Do not store at temperatures above 49 °C / 120 °F. Keep from freezing. Store in a well

7.3.	Specific	end	use(	S

Not available.

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 8: Exposure co	ontrols/personal protection	
8.1. Control parameters		
1,1-Difluoroethane (75-37-6)		
USA ACGIH	ACGIH TWA (ppm)	Not applicable
USA ACGIH	ACGIH STEL (ppm)	Not applicable
Vinyl acetate (108-05-4)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
8.2. Exposure controls Appropriate engineering controls	: Use ventilation adequate to keep expo recommended exposure limits.	sures (airborne levels of dust, fume, vapor, etc.) below
Hand protection	: Wear suitable gloves.	and a when using product
Eye protection Skin and body protection	<ul><li>Safety glasses or goggles are recomm</li><li>Wear suitable protective clothing.</li></ul>	iended when using product.
Respiratory protection		suitable respiratory equipment. Respirator selection must osure levels, the hazards of the product and the safe r.
Environmental exposure controls	: Maintain levels below Community envi	ronmental protection thresholds.
Other information		rial is handled, processed or stored. Wash hands carefully ding to established industrial hygiene and safety practices.

#### **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and	I chemical properties
Physical state	: Gas/Pressurized Liquid.
Appearance	: Clear.
Colour	: White.
Odour	: Sweet.
Odour threshold	: No data available.
рН	: 5.5 - 7.5
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: No data available.
Flash point	: No data available.
Self ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: > 1 (Air = 1)
Relative density	: 1.03
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinematic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidising properties	: No data available.
Explosive limits	: No data available.

#### 9.2. **Other information**

No additional information available

Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

SECTION 10: Stability and reactivity	
10.1. Reactivity	
No dangerous reaction known under conditions o	f normal use.
10.2. Chemical stability	
Stable under normal storage conditions. Contents	under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place
10.3. Possibility of hazardous reactions	
No dangerous reaction known under conditions o	f normal use.
10.4. Conditions to avoid	
Heat. Incompatible materials.	
10.5. Incompatible materials	
Oxidizers. Nitrates. Chlorine bleach.	
10.6. Hazardous decomposition products	
May include, and are not limited to: oxides of carb	ion.
-	
SECTION 11: Toxicological informati 11.1. Information on toxicological effects	
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
TAJ Eco Bond LVT	
LD50 oral rat	Not available.
LD50 dermal rabbit	Not available.
LC50 inhalation rat	Not available.
1,1-Difluoroethane (75-37-6)	
LC50 inhalation mouse	977 g/m³/2h
Vinyl acetate (108-05-4)	
LD50 oral rat	2920 mg/kg
LD50 dermal rabbit	2320 mg/kg
LC50 inhalation rat	11.4 mg/l/4h
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Suspected of causing cancer.
Vinyl acetate (108-05-4)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May cause respiratory race inflation. : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact	<ul> <li>May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.</li> </ul>
Symptoms/injuries after ingestion	: Not a normal route of exposure.
SECTION 12: Ecological information 12.1. Toxicity	

12.1. Toxicity		
Ecology - general	: May cause long-term adverse effects in the aquatic environment.	
12.2. Persistence and degradability		
TAJ Eco Bond LVT		
Persistence and degradability	Not established.	
05/05/2015	EN (English)	4/5

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according to the Hazard Communication Standard (CFR2	9 1910.1200) HazCom 2012.
12.3. Bioaccumulative potential	
TAJ Eco Bond LVT	
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.
SECTION 13: Disposal consideration	s
13.1. Waste treatment methods	
Waste disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Pressurized container: Do not pierce or burn, even after use.
SECTION 14: Transport information	
In accordance with DOT	
14.1. UN number	
UN-No.(DOT)	: UN1950
14.2. UN proper shipping name	
DOT Proper Shipping Name	: Aerosols, non-flammable
Department of Transportation (DOT) Hazard Classes	: 2.2
Hazard labels (DOT)	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.
SECTION 15: Regulatory information	

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Vinyl acetate (108-05-4)		
Listed on SARA Section 302 (Specific toxic chemical listir Listed on SARA Section 313 (Specific toxic chemical listir		
SARA Section 302 Threshold Planning Quantity (TPQ)	1000	
SARA Section 313 - Emission Reporting 0.1 %		

#### 15.2. US State regulations

TAJ Eco Bond LVT	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

#### **SECTION 16: Other information** Indication of changes

Indication of changes	:	None.
Date of issue	:	08/26/2016
Other information	:	None.

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