ARMADAÒ AM40 Acrylic Urethane Wood Flooring Adhesive

ENVIRONMENTAL PERFORMANCE:

1. Wet Lay System saves time and money. Reduces installation time by 50%. Easier and faster than "flashed" system.

2. Acrylic urethane means a high quality bond.

3. Super aggressive rebond of adhesive reduces hollow and loose spots.

4. Provides a much stronger bond than the pressure sensitives being used for wood flooring.

5. Unlike moisture cure urethanes, Armada® AM-40 cleans up easily from urethane finishes even when completely dry with Mineral Spirits.

- 6. Solvent-free / Non-hazardous
- 7. Trowels easily.
- 8. Freeze-thaw stable.
- 9. Easy clean up.

DESCRIPTION:

Armada® AM-40 was developed with the installer in mind. It was designed specifically for gluing down most engineered plank, strip and pre-finished parquet flooris including foam backed parquet. Armada® AM-40 is approved for gluing down felt back moisture barrier (slip sheets).

Therefore, Bolick Distributors has the experience and confidence to fully warrant Armada® AM-40 Acrylic Urethane Wood Flooring Adhesive with most engineered plank and parquet flooring lines.

Armada® AM-40 is fully warranted and works well for gluing down 7 1/2" wide engineered wood products that are known as "Floating Floors". Armada® AM-40 is approved for gluing down cork underlayment.

Armada® AM-40 is approved for use over a wide range of subfloors: concrete, terrazzo, plywood, OSB, underlayment grade particle board, sheet vinyl and vinyl tile and ceramic tile are acceptable substrates when properly prepared.

Armada® AM-40 is <u>NOT</u> recommended for glueing down solid strip flooring products.

From an installers point of view, it saves time and money, because it is a wet lay product which reduces installation time up to 50% over "flashed" systems. No rolling is required.

APPROVED SUBFLOORS & PREPARATIONS:

The following are approved subfloor applications and general preparation procedures required to insure successful installations. All subfloors must be structurally sound, clean, dry, smooth, and free of dust, wax, oils, paint, and curing agents, and other contaminates that would interfere with a good bond.

BOLICK DISTRIBUTORS 2055 N. AIRWAY DRIVE BATON ROUGE, LA 70815 *Concrete:* Level within 3/16" in 6 feet. Use portland cement type floor patch to fill all low spots that exceed 3/16" in 6 feet, and grind any high spots. From an adhesion perspective, smooth slopes in concrete subfloors are generally not as big a problem as sudden dips and high spots. Sudden dips and high spots must be corrected prior to installation to prevent loose or hollow spots after installation. New concrete must be fully cured with heating and cooling systems in operation prior to installation.

Ceramic Tile: Tiles must be securely fastened to the subfloor. The surfaces of the tile must be roughened up with a sander or grinder.

Terrazzo: Light sanding of the surface is required to ensure proper bond. Never sand asbestos containing products. Clean the surface with mineral spirits after sanding and allow to dry before starting the installation.

VINYL: The most desirable method of installing over vinyl is to cover it by stapling down a thin layer of plywood. However, vinyl is an acceptable subfloor if properly prepared. Vinyl would include Sheet Vinyl and VCT Tile.

Sheet Vinyl: Sheet vinyl must be securely fastened to the subfloor, perimeter glued or loose laid sheet goods are not acceptable substrates for gluing down wood floors. Before starting installation make sure the vinyl is fastened to the subfloor with full spread adhesive, otherwise, the vinyl must be removed. Light sanding of existing vinyl surface is required to ensure proper bond. Never sand asbestos containing products. Clean the surface with mineral spirits after sanding and allow to dry before starting installation.

VCT Tile: All tiles must be securely bonded to the subfloor. Light sanding of the surface is required to ensure proper bond. Never sand asbestos containing products. Clean the surface after sanding with Mineral Spirits and allow to dry before starting installation.

Wood Substrates: Acceptable wood/wood composite subfloors include plywood, underlayment grade particle board, OSB tongue and grooved boards. Existing squeaks or loose spots in the subfloor must be eliminated before spreading adhesive. High joints or sudden dips in the subfloor must be eliminated by sanding or patching prior to installation. AM-40 Wood Flooring Adhesive will perform satisfactorily up to 13% moisture content on wood subfloors. However, the wood flooring manufacturer's moisture content recommendations should not be exceeded. A 6 mil or greater polyvinyl overlapped at least 6" on earthen surfaces in crawl spaces will greatly reduce the transmission of moisture from the ground into the subfloor and enhance the longevity and performance of wood flooring.

NEVER USE AM-40 WOOD FLOORING ADHESIVE OVER CUTBACK ADHESIVES.

NEVER USE AM-40 WOOD FLOORING ADHESIVE TO INSTALL TEAKWOOD.

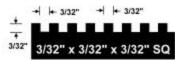
BOLICK DISTRIBUTORS 2055 N. AIRWAY DRIVE BATON ROUGE, LA 70815 NEVER USE AM-40 WOOD FLOORING ADHESIVE TO INSTALL BAMBOO.

NEVER USE AM-40 WOOD FLOORING ADHESIVE TO INSTALL SOLID STRIP FLOORING.

CLEAN-UP:

Water when wet, or Mineral Spirits when dry. Follow solvent manufacturer's precautions when using solvents.

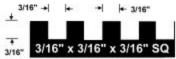
TROWEL SIZE REQUIREMENTS AND SPREAD RATES:



For Pre-Finished Parquet; including foam backed parquet and Gluing down Cork Underlayment. Spread rate is 70-80 sq. ft. per gallon.



For Engineered plank 1/4" to 5/16" thick. Spread rate is 50- 55 sq. ft. per gallon.



For Engineered 3/8" to 9/16" thick. Spread rate is 35-40 sq. ft. per gallon.



For Engineered plank 3/4" thick and Engineered plank 4" and wider. Spread rate is 30-35 sq. ft. per gallon.

WARRANTY:

The adhesive manufacturer has thoroughly field tested AM-40 with the following wood flooring lines and fully warrants the performance of AM-40 with these products:

ARMADA Engineered Plank

• BRUCE 3 and 5 ply engineered plank and 1/4" - 5/16" parquet tile, including foam back.

• HARRIS-TARKETT Engineered Plank and Longstrip

• HARTCO 3 AND 5 ply ENGINEERED PLANK AND 1/4" - 5/16" parquet tile, including foam back.

- MANNINGTON 3 and 5 ply plank wood flooring
- MIRAGE Engineered Plank
- PREMIER engineered plank
- ROBBINS engineered plank and parquet
- KAHRS plank
- Pan Tim Engineered Plank
- Bauwerk
- Terra
- Columbia
- Award
- ALL 7 PLY Engineered Plank Flooring Products except BAMBOO

The adhesive manufacturer warrants that Armada® AM-40 Adhesive will bond the approved engineered plank and parquet wood flooring products to concrete, terrazzo, sheet vinyl, vinyl tile, plywood and OSB for a period equal to the wood flooring manufacturer's product warranty. In the event the wood flooring manufacturer does not offer a product warranty, BOLICK will warrant Armada® AM-40 for one year from the date of installation. This warranty is exclusive to the original purchaser of Armada® AM-40 Adhesive and may not be assigned or transferred.

THIS WARRANTY IS CONTINGENT UPON THE FOLLOWING:

1. Wood flooring products must be installed in accordance with Armada® AM-40 bucket label directions.

The installation and application must be in full compliance with all warrantor's instructions, both the adhesive manufacturer and wood flooring manufacturer.
The evaluation and approval of a potential claim prior to any replacement work by a BOLICK representative.

EXCLUSIONS:

- Damages arising from flooding, plumbing breakage and similar catastrophes.
- Problems arising from defective wood flooring, misuse or abuse.
- Damages or failures arising as a result of hydrostatic pressure.

BOLICK DISTRIBUTORS 2055 N. AIRWAY DRIVE BATON ROUGE, LA 70815 In the event of a warranty claim, BOLICK will pay for one time replacement of the portion of the installation that is defective. This includes all reasonable materials and labor. BOLICK specifically excludes and is not liable for any other damage or loss, including consequential or incidental damage or loss. BOLICK is not responsible for workmanship not in compliance with published Armada® AM-40 literature.

The above field testing and warranty does not include foreign produced wood flooring products or the high-pressure (plastic-type surface) floorings without prior testing and authorization from BOLCK.

INSTALLING THE FLOOR:

Refer to BOLICK'S recommendation for floor layout and expansion space requirements. After a starting chalk line is established spread a run of Armada® AM-40, usually about a 24" wide run is comfortable to work with. Start installing the floor immediately. Never spread more adhesive than can be covered within 45 minutes.

Armada® AM-40 IS A WET LAY ADHESIVE SYSTEM, DO NOT FLASH OR ALLOW THE ADHESIVE TO PARTIALLY CURE BEFORE STARTING THE INSTALLATION. DO NOT ROLL THE FLOOR. Restrict foot traffic or moving heavy objects back onto the newly installed floor for at least 6-8 hours.

October 21, 2004

MATERIAL SAFETY DATA SHEET

Bolick Distributors 2055 N. airway Drive Baton rouge, LA 70815

SECTION 1. PRODUCT IDENTIFICATION

PRODUCT NAME: ARMADA AM40 CHEMICAL FAMILY: Water Based Adhesive

SECTION 2. HAZARDOUS INGREDIENTS AND EXPOSURE LIMITS

Chemical Name

CAS <u>Number</u> <u>V</u>OSHA PEL

% by <u>Weight</u>

ACGIH TLV

None.

SECTION 3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Eyes, Skin, Inhalation, and Ingestion. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known. POTENTIAL HEALTH EFFECTS: EYE CONTACT: May cause slight irritation. SKIN CONTACT: May cause slight irritation. INGESTION: Do not ingest. No known side effects. INHALATION: No effect known. CHRONIC: None known. CARCINOGENICITY: NTP – NO OSHA – NO IARC – NO

SECTION 4. FIRST AID MEASURES

EYE CONTACT: Flush with water for 15 minutes. Call physician if irritation occurs. SKIN CONTACT: Wash with soap and water. INGESTION: Do not induce vomiting. Consult Physician Immediately. INHALATION: Move person to fresh air.

SECTION 5. FIRE-FIGHTING MEASURES

FLASH POINT (°)F: None.

FIRE-FIGHTING INSTRUCTIONS: Water for dried material. Use protective clothing and self-contained breathing apparatus.

DECOMPOSITION PRODUCTS: Dried material may produce CO, CO₂, H_2O , N_xO , and other products from the burning of aromatic hydrocarbons.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dispense sand, sawdust, or vermiculite. Collect and place in waste container. Wash area thoroughly with water.

SECTION 7. HANDLING AND STORAGE

HANDLING: Use good hygienic practices. (Wash hands before eating, using washroom, or smoking.) STORAGE: Store above 40°F.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT: EYE/FACE PROTECTION: Safety glasses or goggles to prevent contact with material. SKIN PROTECTION: Gloves. RESPIRATORY PROTECTION: Not necessary with good ventilation. ENGINEERING CONTROLS: Normal room ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°F): 212 SPECIFIC GRAVITY (WATER = 1): 1.17 VAPOR PRESSURE: Same as water. VAPOR DENSITY(air=1): Same as water. % VOLATILE BY WEIGHT: 16 pH: 8.3 APPEARANCE AND ODOR: Tan paste with little or no odor.

GRAMS VOLATILE ORGANIC COMPOUNDS/LITER: 0{Calculated}

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable. POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: None known. HAZARDOUS DECOMPOSITION PRODUCTS: None.

SECTION 11. TOXICOLOGICAL INFORMATION

No information available.

SECTION 12. ECOLOGICAL INFORMATION

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State and Local regulations.

SECTION 14. TRANSPORT INFORMATION

For domestic transportation purpose, this product is not designated as a hazardous material by the

U.S. Department Of Transportation.

SECTION 15. REGULATORY INFORMATION

TSCA: This product is listed with TSCA. SARA TITLE III: Section 311 and 312 Health and Physical Hazards: Immediate Delayed Fire Pressure Reactivity [X] [] [] [] [] []

SECTION 16. OTHER INFORMATION

HMIS RATINGS:Health = 1Flammability = 0Reactivity = 0Personal Protective Equipment = BHazard rating scale:0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe

Bolick Distributors believes the statements, technical information and recommendations contained herein are reliable. They are given without warranty or guarantee of any kind, expressed or implied.

DATE ISSUED: October 21, 2004

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