

# R1530

SUPERIOR

Moisture Cure  
Urethane

## All-in-One Wood Flooring Adhesive

Roberts® R1530 is a solvent free 100% solids moisture cure urethane product that performs as an all-in-one, single application, adhesive, moisture vapor barrier and sound reducer for wood and bamboo flooring installations. It helps to protect against unforeseen moisture vapors emissions that can destroy a wood flooring installation.

### All-in-One

- Bamboo and wood flooring adhesive
- Moisture vapor barrier
- Sound reducer (IIC 71\*, STC 67\*, ΔIIC 22)
- One product does it all!

### Moisture Cure Urethane

- Incredible bond strength
- Use to install all types of wood and bamboo flooring
- 100% solids – no water or solvents
- Easy clean-up with R5505

### Enviro Friendly

- Solvent free
- VOC: 0 g/L and 0% by weight
- VOC compliant adhesive that exceeds the strict requirements of the South Coast Air Quality Management District.

May contribute to one or more LEED points.



Available size:  
4 Gallon

**All-in-ONE,  
Single-Step Application!**

For more information, contact your local sales rep, call (866) 435-8665 or visit [www.robertsconsolidated.com](http://www.robertsconsolidated.com)

\*Sound tests conducted on 6 in. concrete slab with 3/8 in. thick engineered wood and 5/8 in. suspended ceiling



M2711-6215



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#### Features:

- Adhesive, moisture vapor barrier and sound reducer – All in one
- For bamboo, solid and engineered wood flooring
- Single step application
- Moves with the wood

#### Sound Ratings:

- IIC 71 (impact sound transmission test)\* ASTM E492/ASTM E989-06
- STC 67 (sound transmission loss test)\* ASTM E90-04/ASTM E413-04
- ΔIIC 22 (effectiveness of reducing impact sound) ASTM 2179-03

\*Sound testing conducted by an independent laboratory on 6 in. concrete slab with 3/8 in. thick engineered wood and 5/8 in. suspended ceiling.

#### Enviro Friendly:

- Solvent free
- Zero VOCs (calculated)

Roberts R1530 is a solvent free adhesive and meets the strict requirements of the South Coast Air Quality Management District and may contribute one LEED point for “Low-Emitting Material-Adhesive and Sealant” (IEQ Credit 4.1). Visit usgbc.org for additional details.

**Uses:** For bonding solid wood plank, bamboo, flat milled shorts, finger/block parquet (plain back), engineered and acrylic impregnated wood flooring that are recommended for glue-down applications, cork underlayment and plywood.

#### Substrates: When used as an adhesive

**only**– Concrete, APA grade plywood, underlayment grade oriented strand board, vinyl composition tile (well bonded, free of wax, residential engineered wood floors only), acoustic cork underlayment, radiant heat systems, gypsum underlayment and terrazzo.

**When used as an adhesive and moisture vapor barrier**– Concrete only.

**Surface Preparation:** Subfloors must be structurally sound, dry, flat, level and free of excess moisture/alkali and all substances (oil, wax, grease, paint, oil based sealers, etc.) that might interfere with the performance of the flooring or its installation.

All substrate cracks, holes, high spots and irregularities must be adequately repaired. Irregular substrates will lead to “hollow spots” or “popping.” Patching compounds must be suitable for the use application, polymer-modified and applied according to the manufacturer’s instructions. Expansion or other moving joints must not be filled or covered with

flooring. Refer to ASTM 710 Standard Practice for Preparing Concrete Floors.

Concrete must be flat ( $\leq 1/8$  inch in 10 ft.) with a minimum 3,000 psi. Burnished or steel troweled concrete must be roughened using a minimum 30-grit abrasive. Ensure concrete substrates and patching/leveling compounds have a lightly textured surface (Concrete Surface Profile 4, 5 or 6 – broom/brush finish or light to moderate scarification) so that the adhesive can penetrate the pores of the concrete and bond properly.

**Wood**– Subflooring, such as APA underlayment grade plywood, hardwood, oriented strand board (lightly sanded), or other materials, must be flooring grade and installed to the manufacturer’s specifications with adequate ventilation and moisture protection. Ensure wood substrates have a minimum 18 in. crawl space with adequate ventilation and moisture barrier protection. Cracks, chips and joints must be properly patched or repaired. Wood substrates must not have more than 12% moisture content. Ensure moisture content of wood subfloor is within acceptable moisture range of wood flooring prior to installation.

**Gypsum**– Gypsum based underlayments must be appropriately cured, dry, on or above grade, with a compressive strength of  $>2,500$  psi for solid wood and  $>2,000$  psi for engineered wood flooring. Consult flooring manufacturer for their specific recommendations for gypsum based underlayments.

Do not use this product as a moisture vapor barrier over water susceptible substrates such as plywood or gypsum compounds.

**General:** Ensure HVAC is fully operational and is set to the temperature that will be maintained during the life of the flooring installation.

Ensure substrate, flooring material and adhesive are fully acclimated prior to installation at the same temperature and humidity level expected during normal use (between 65–95°F) with a relative humidity (RH) of no greater than 65%. Refer to flooring manufacturer’s specific recommendations and industry standards.



FLOORING TYPE	TROWEL SIZE	ROBERTS ITEM #	COVERAGE
Wood Flooring ( $\geq 1/2$ in. to $< 3/4$ in. thick)	3/8 in. x 5/16 in.	10-839 / 10143	25–30 sq. ft. per gallon
Wood Flooring ( $< 1/2$ in. thick)	Tiger Tooth™ 1/4 x 3/16 in.	10-838 / 10144	30–35 sq. ft. per gallon

The trowel notches referenced are those typically recommended for the type of flooring being installed. They are normally the minimum size recommended. Surface conditions (roughness and porosity of substrate), type of flooring and backing will ultimately determine the required trowel notch size and coverage. Always check with the specific flooring manufacturer’s recommendations for their specific trowel requirements. Ensure 100% transfer of adhesive to the substrate and the flooring backing.

**General (continued):**

Materials, substrate and area temperature must be between 65–95°F with a maximum RH of 65% for 48 hours before and during installation as well as for 72 hours afterward. Large temperature or humidity increases or decreases can affect the flooring and performance of the installation.

This membrane reduces the transmission of moisture vapor from the concrete slab directly below it. It will not prevent moisture related issues such as leaks, spills, improper acclimation, improper drainage, improper construction, etc. Do not use in areas subject to hydrostatic pressure.

Ensure radiant heated floors have been in operation and that all excess residual moisture is removed (evaporated) from the system and the concrete slab is fully cured. Turn the heating system off to ensure that the adhesive does not dry too fast.

Ensure adequate ventilation during flooring installation.

Refer to NWFA.org for additional information as well as wood manufacturer’s installation guidelines.

**Physical Characteristics (70°F, RH 50%):**

Working Time: Up to 120 minutes

Initial Cure Time: 8–10 hours

Final Cure Time: Minimum 24 hours

Shelf Life: One year in unopened container

Product Type: Urethane

Concrete Moisture Vapor Emissions: Visibly dry/Dry to the touch

Freeze-thaw stable

**Installation:** Do not install solid wood flooring or bamboo below grade or over vinyl composition tile. **CLEAN ANY ADHESIVE FROM THE SURFACE OF THE FLOORING IMMEDIATELY** with *Roberts R5505*. *R1530* is a chemical curing adhesive and once dry will form a chemical bond with the flooring surface. **IT IS VERY IMPORTANT TO REMOVE THIS ADHESIVE WHILE IT IS STILL FRESH AND BEFORE IT HAS COMPLETELY CURED.**

**Wet-Lay Method** – Apply adhesive with the appropriate notched trowel. Immediately install flooring into wet adhesive. Ensure 100% coverage of adhesive to the flooring backing and the substrate to ensure a void free bond.

**Walk-on Method** – Apply adhesive with the appropriate notched trowel and allow it to develop a slight tack. Install flooring into the adhesive. After your “walk-on” set of boards have been installed; secure them with the appropriate surface tape to prevent boards from sliding or separating. Roll flooring installation to ensure proper contact.

The amount of time in which the adhesive cures will vary with temperature and humidity. The higher the temperature and the higher the humidity the faster the adhesive will cure. Lift a board periodically to ensure 100%

coverage of adhesive to the flooring backing and the substrate. If the adhesive is not transferring to the backing of the wood; remove adhesive and reapply.

**After Installation** – Restrict foot traffic and moving of heavy objects for 24 to 48 hours to allow adhesive to cure properly. Premature traffic can cause installation failure.

**Clean Up: Fresh adhesive** – use *Roberts R5505* sparingly with a clean, white cotton cloth to immediately clean any adhesive from the surface of prefinished floors. Always test on a scrap of the flooring material prior to using on an installed floor to ensure that the cleaner will not damage the surface. **ONCE R1530 CURES IT IS EXTREMELY DIFFICULT TO REMOVE.**

Refer to material safety data sheet, [www.robertsconsolidated.com](http://www.robertsconsolidated.com) and industry standards prior to installation for additional information. For installation questions that are not covered in this document please contact our Technical Services Department at (706) 277-5294.

**Limited Warranty:** Buyer assumes all risk of use, handling and storage of product not in strict accordance with the label, printed literature and industry standards. **This limited warranty excludes all other express or implied warranties including the warranties of merchantability or fitness for a particular use or purpose.** Any implied warranties arising by operation of law are limited to one year. Roberts will not be liable for any incidental or consequential damages. Some states do not allow these limitations or exclusions, therefore they may not apply. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**Available Sizes:**

SIZE	PRODUCT #	UPC
5 Gallon	R1530-5	075378153054
4 Gallon	R1530-4	075378153047



**WARNING: EXISTING FLOORING AND ADHESIVES MAY CONTAIN ASBESTOS.** Unless you have confirmation that the existing flooring system is not asbestos containing, do not sand, dry sweep, dry scrape, abrade, drill, saw, bead blast, mechanically chip or pulverize existing flooring or adhesive without taking all appropriate precautions. Refer to local, state and federal guidelines for treatment and removal of these products. You may also refer to the Resilient Floor Covering Institute’s “Recommended Work Practices for Removal of Resilient Floor Coverings.”

**EXISTING PAINT MAY CONTAIN LEAD.** Unless you have confirmation that the existing paint is not lead containing, do not sand, dry sweep, dry scrape, abrade, drill, saw, bead blast, mechanically chip or pulverize existing paint without taking all appropriate precautions. Refer to local, state and federal guidelines for treatment and removal of lead containing paint. You may also refer to [www.epa.gov/lead](http://www.epa.gov/lead)



# WARRANTY

## ROBERTS R1530

### LIMITED LIFETIME WARRANTY

Roberts Consolidated Industries, Inc. warrants that Roberts R1530 All-In-One Wood Flooring Adhesive will be free from manufacturing defects, under normal use, for a period equal to the flooring manufacturer's flooring warranty beginning from the date of purchase.

If a flooring installation fails as a direct result of a manufacturing defect of this product Roberts will pay the reasonable costs for replacement materials and, when installed by a professional installer, Roberts will pay reasonable labor for the repair or replacement of the defective area, as determined in Roberts' sole discretion. The product is warranted provided the initial flooring installation was installed in accordance with product instructions, the flooring manufacturer's instructions and industry standards. The determination of whether the product is suitable for its intended use is solely the responsibility of the user of the product. This warranty offers a one-time replacement only to the original owner.

Roberts reserves the right to be provided samples of the flooring, adhesive and surface preparation material and reserves the right to inspect any floor covering installation that is alleged to be defective prior to authorizing any claim. Any claim repaired or replaced without written authorization from Roberts will void the warranty. Roberts is not responsible for determining the compatibility between the product, flooring and subfloor beyond what is stated in Roberts' written literature.

This warranty excludes, but is not limited to, improper workmanship, improper storage, defective products other than Roberts, products not sold as

first quality, substrate irregularities or contamination, hydrostatic pressure, flooding, improper drainage, improper temperature or humidity levels, improper maintenance, acts of nature, moisture issues not related to excessive moisture coming through the adhesive membrane, or any other situation out of Roberts' control. To qualify for the warranty the batch number of the adhesive and purchase receipt must be supplied to Roberts. Roberts assumes no responsibility for loss of use or any other incidental or consequential damages. This warranty is nontransferable and is the only remedy offered.

**There are no implied warranties, including merchantability and fitness for a particular purpose.** Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

This limited warranty becomes null and void if the customer does not provide the warrantor written notice within thirty (30) days of the discovery of any alleged deficiency. This Limited Warranty is effective August 30, 2011 and supersedes all previous warranties.

Submit claims to:  
ROBERTS CONSOLIDATED INDUSTRIES, INC.  
Attn: Technical Services Department  
300 Cross Plains Boulevard  
Dalton, Georgia 30722

# Material Safety Data Sheet

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**PRODUCT NAME: ROBERTS R1530 All in One Wood Flooring Adhesive**  
**Product Code: R1530**

MANUFACTURER : ROBERTS CONSOLIDATED INDUSTRIES, INC.  
ADDRESS : 300 CROSS PLAINS BLVD.  
DALTON, GA 30722

EMERGENCY PHONE : (706) 277-5294  
INFORMATION PHONE : (706) 277-5294

EFFECTIVE DATE: 04/01/11  
Issued by: M. King

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

	<u>Wt%</u>	<u>CAS</u>	<u>R Phrases</u>
Polypropylene glycol	16-21%	25322-69-4	
Distillates, hydrotreated heavy paraffinic	16-21%	64742-54-7	
Calcium Carbonate	63-68%	1317-65-3	
1,3-Butadiene, homopolymer, hydroxyl-terminated	0-2%	69102-90-5	
*Polymeric Diphenylmethane Diisocyanate	0-10%	9016-87-9	20-36/37/38-42

## 3. HAZARDS IDENTIFICATION

Warning! May cause eye, skin and respiratory tract irritation. Harmful if inhaled. May cause allergic respiratory reaction. May cause allergic skin reaction.

## 4. FIRST-AID MEASURES

### Inhalation

Move victim to fresh air, seek medical attention. Asthmatic-type symptoms may develop immediately or up to several hours later. Consult physician if this occurs.

### Skin Contact

Wash with soap and water.

### Eye Contact

Flush with copious amounts of water for at least 15 minutes. Consult physician or ophthalmologist for follow-up.

### Ingestion

Do not induce vomiting. Wash mouth with water. Consult physician.

### Note to Physician

Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision. Skin: This compound is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn. Ingestion: Treat symptomatically. MDI has a very low oral toxicity. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of this compound. Respiratory: This compound is a known pulmonary sensitizer. Treatment is essentially symptomatic. An individual having a skin or pulmonary sensitization reaction to this material should be removed from exposure to any isocyanate.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

Dry chemical, carbon dioxide, foam, water spray for large fires.

### Hazardous Combustion Products

Carbon dioxide, carbon monoxide, oxides of nitrogen, traces of hydrogen cyanide, isocyanate monomer vapors.

### Protection of Firefighters

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. During a fire isocyanate monomer vapors and other irritating, highly toxic gases may be generated by thermal decomposition.

### Specific Fire or Explosion Hazards

At temperatures greater than 400°F isocyanates can polymerize and decompose which can cause pressure buildup in closed containers. Explosive rupture is possible. Therefore, use cold water to cool fire exposed containers.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions - Wear full protection gear. (See Section 8.)

Environmental Precautions - Do not allow product to get into drains, soil, or surface water.

Methods of Cleaning Up - Evacuate and ventilate spill area; dike spill to prevent entry into water system. Wear full protective equipment. Absorb with inert material. Spill can be neutralized with the following solution (90% water, 8% ammonia, 2% detergent). Add about 10 parts of neutralizer per part of isocyanate. Scoop into disposal containers. Do not seal waste containers as CO<sub>2</sub> evolution can cause pressure buildup and container rupture.

## 7. HANDLING AND STORAGE

Store in tightly closed containers to prevent moisture contamination. Care should be taken to avoid contact with skin and eyes. Do not breathe aerosols or vapors. Keep away from food and drink.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines - 0.005 ppm TWA ACGIH; 0.02 ppm Ceiling OSHA

Engineering Controls - Local exhaust should be used to keep airborne levels below TWA.

### Personal Protective Equipment

- Respiratory Protection  
When TWA is exceeded, a self-contained breathing apparatus or supplied air respirator should be used.
- Skin Protection  
Permeation resistant gloves (butyl rubber, nitrile rubber, pvc or polyvinyl alcohol).
- Eye/Face Protection  
Glasses with side shields, chemical splash goggles and/or face shield.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance            Liquid  
Color                 Tan  
Odor                  Slightly musty odor  
Specific Gravity      1.5333  
Vapor Pressure      <0.00001 mm Hg @ 25°C for MDI  
Flash point          200°C PMCC (ASTM D-93)  
COATING V.O.C.: 0 g/l  
V.O.C. by Weight: 4.77% (Method 310)  
SOLUBILITY IN WATER: NOT DETERMINED

## 10. STABILITY AND REACTIVITY

Chemical Stability    Stable  
Conditions to Avoid   Excessive heat.  
Materials to Avoid    Water, amines, strong bases, and alcohols.

Hazardous Polymerization     may occur     will not occur    Through contact with moisture, other materials which react with isocyanates, or temperatures above 400°F may cause polymerization.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

- Ingestion            LD50 > 10,000 mg/kg (Rat)
- Skin Contact        LD50 > 6200 mg/kg (Rabbit)
- Inhalation            LC50 4 hour LC50 for polymeric MDI in rats ranges from 370 – 490 mg/m<sup>3</sup>.

### Irritation

Isocyanates react with skin protein and moisture and can cause irritation. Prolonged contact can result in skin sensitization. Vapors can cause burning in eyes and if left untreated, can cause corneal damage.

### Sensitization

MDI has been shown to cause dermal and respiratory sensitization.

### Carcinogenicity

NOEL 0.2 mg/m<sup>3</sup> in rats exposed to polymeric MDI for 6 hours per day, 5 days per week for one or two years.

## 12. ECOLOGICAL INFORMATION

### Mobility and Bioaccumulation Potential

Not determined.

### Degradation

Not determined.

### Aquatic Toxicity

LC50 – 24 hour (static): Greater than 500 mg/liter for Daphnia magna, Limaea stagnalis, and Zebra fish for polymeric MDI.

### 13. DISPOSAL CONSIDERATIONS

#### Disposal

Incinerate or bury in landfill in accordance with federal, state and local regulations. Incineration is the preferred method of disposal.

#### Wastes or Residues

Same as above.

#### Contaminated Packaging

Empty containers must be handled with care due to product residue. Decontaminate containers prior to disposal. Empty decontaminated containers should be crushed to prevent reuse. DO NOT HEAT OR CUT EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH. (See Fire Fighting Measures and Stability & Reactivity). Gases may be highly toxic.

### 14. TRANSPORT INFORMATION

#### Road:

D.O.T. PROPER SHIPPING NAME (49CFR172.101 - 102): ADHESIVE.

D.O.T. HAZARD CLASSIFICATION (49CFR172.101-102):  
PRIMARY: NONE SECONDARY: NONE

D.O.T. LABELS REQUIRED (49CFR172.101-102): NONE

D.O.T. PLACKARDS REQUIRED (49CFR172.504): NONE

BILL OF LADING DESCRIPTION: ADHESIVE, NOS UN/NA CODE: N/A

FREIGHT CLASS: 60; LIQUID, NOI, NMFC 156240

#### Sea:

Proper shipping name: **Non-Regulated**

Sea – IMO/IMDG Class: N/A UN Nr: N/A Label: N/A

Packing Group: N/A

Marine Pollutant: N/A EMS: N/A

#### Air

Proper shipping name: **Non-Regulated**

Air – ICAO/IATA Class: N/A UN Nr: N/A Label : N/A

Sub Class: N/A

Packing Group: N/A Pack Instr. Passenger: N/A

Pack Instr. Cargo: N/A

#### Remarks:



## 15. REGULATORY INFORMATION

### EC Classification and User Label Information

Hazard Symbol: Xn

Risk Phrases:

20 Harmful by inhalation.  
36/37/38 Irritating to eyes, respiratory system and skin.  
42 May cause sensitization by inhalation.

Safety Phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
51 Use only in well-ventilated areas.  
23 Do not breathe fumes/vapors/or spray.

Chemical name:

Diphenylmethane Diisocyanate, isomers and homologues.

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

\*Chemical Name: Polymeric Diphenylmethane Diisocyanate – 9016-87-9 - 7%

Remarks:

An immediate health hazard

A delayed health hazard

## 16. OTHER INFORMATION

R20 Harmful by inhalation.  
R36/37/38 Irritating to eyes, respiratory system and skin.  
R42 May cause sensitization by inhalation.

HMIS – H = 2, F = 1, R = 0 (\* CHRONIC)

### **In regard to Hydroxy-Terminated Polybutadiene (HTPB) Containing Materials only:**

These products and technical data related to these products are export controlled by the U.S. Government. In case of an international shipment, these products and/or technical data are licensed by the U.S. government for use and/or resale in the countries identified above. Export, reexport, or other diversion, either in their original form or, after being incorporated in an intermediate process into other end-items, is strictly prohibited unless expressly authorized by the cognizant agency of the U.S. Government. When the material is cross-linked (cured) the finished material is not subject to export regulation.

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY EXPRESSED OR IMPLIED IS MADE. ROBERTS URGES USERS OF THIS PRODUCT TO EVALUATE ITS SUITABILITY AND COMPLIANCE WITH LOCAL REGULATIONS AS ROBERTS CANNOT FORESEE THE FINAL USE OF THE PRODUCT, NOR THE FINAL LOCATION OF USAGE.