



## HARDBOND™ Repair “A” and “B”

### DESCRIPTION

HARDBOND™ Repair A and B is a two component polyurea designed for filling cracks and spalls in concrete. It has a fast cure time with excellent adhesion and its' low viscosity allows for fast turnaround of coating projects or as a stand alone product. Silica sand void of moisture may be added to Repair for deeper voids in concrete. Do not use on concrete that has a high moisture content or a visible presence of water. Only apply in ½" lifts.

Packaging consists of One Part “A” to One Part “B” for a total of 10 gallons.

### ADVANTAGES:

- Fast Cure time, as little as 10 to 20 minutes for foot traffic
- Cures at temperatures just above freezing
- Recoat within 2 hours for proper adhesion

### TECHNICAL DATA

#### Coverage

Coverage is dependent on depth and width of crack and or spall.

#### Packaging

Packaging consists of One Part “A” to One Part “B” for a total of 10 gallons.

#### Shelf Life

12 months in original unopened factory sealed containers. Keep away from extreme cold, heat or moisture. Keep out of direct sunlight and away from fire hazards.

Elongation	10%
Compressive Strength	4200 PSI
Tensile Strength	4400 PSI

## **SURFACE PREPARATION**

Substrate must be properly prepped, free of any dust or debris, moisture, and properly cured for a minimum of 28 days.

## **MIXING**

Shake or pre-mix each bucket for 30 seconds prior to mixing Parts A and B together. Mix 1 part "A" to 1 part "B" into a clean pail using a paint stick or Jiffy-type mixer on low speed. Move mixer around in pail for 20 to 30 seconds to ensure proper mix of the "A" and "B" components. Only mix as much product as can be placed within 1 to 3 minutes of mixing.

Mix Ratio By Volume: A:B = 1:1

## **APPLICATION**

Apply with a squeeze bottle, squeegee, or trowel if adding silica sand.

## **CURE TIME**

Cure times vary on temperature conditions but typically are as little as 10 to 20 minutes for foot traffic. Recoat, if necessary, should occur within 2 hours for proper adhesion.

## **CLEANING**

Clean all application equipment with a specified cleaner. Once the material hardens, it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.

## **STORAGE**

Keep lids on all products when not in immediate use. Store products in proper containers and in temperatures between 45° and 80° F. One year shelf life in unopened containers. Keep away from heat, sparks, open flames and hot surfaces. NO SMOKING when using this product.

## **HEALTH AND SAFETY**

Always wear proper safety equipment to protect eyes and skin. Keep a neat, clean mixing area to avoid potential safety issues. Make sure to read and understand all SDS sheets and become familiar with all application procedures and best practices. Recommended for use by professionals only! In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. If breathing has stopped, administer CPR. Seek immediate medical attention. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

## **IMPORTANT NOTICE**

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of Allsource Supply Inc. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. Allsource Supply assumes no legal responsibility for use upon these data. Allsource Supply assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage.

ALLSOURCE SUPPLY INC.

2752 Vinland Street

Oshkosh, WI 54901

Phone: 833-663-4255

[www.allsourcesupplyinc.com](http://www.allsourcesupplyinc.com)

[info@allsourcesupplyinc.com](mailto:info@allsourcesupplyinc.com)



## SECTION 1: CHEMICAL AND MANUFACTURER IDENTIFICATION

Product Name: 271-350B Repair Patch Part B

Product Code: 271-350B

**Allsource Supply, Inc**  
 2752 Vinland Street  
 Oshkosh, WI 54901  
 1-833-663-4233  
 info@allsourcesupplyinc.com  
 www.allsourcesupplyinc.com

**24 Hour Emergency:** INFOTRAC: 1-800-535-5053  
 Or 1-352-323-3500 (outside USA)

INFOTRAC Customer ID: 111088

NOTE: INFOTRAC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

Not recommended for:

Because many of the conditions are within the user's knowledge and control, it is essential that the user evaluate and determine whether the product is suitable and appropriate for a particular use and intended application, and complies with all local applicable laws, regulations, standards, and guidance.

## SECTION 2: HAZARD(S) IDENTIFICATION

Prepared according to Global Harmonized System (GHS) Standards

**GHS Classification Scale** 1=Severe Hazard; 4=Slight Hazard

### GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Inhalation Toxicity	Acute Tox. 4	
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3$ < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases

### GHS Hazards

H226	Flammable liquid and vapour
H315	Causes skin irritation
H317	May cause an allergic skin reaction

H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure

#### **GHS Precautions**

P210	Keep away from heat, sparks, open flames and hot surfaces. No smoking!
P233	Keep container tightly closed
P240	Ground / bond container and receiving equipment
P241	Use explosion-proof electrical, ventilating, lighting equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe dust/fume/gas/mist/vapours/spray
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P280	Wear protective gloves, protective clothing, eye protection, face protection
P285	In case of inadequate ventilation wear respiratory protection
P312	Call a POISON CENTER or doctor/physician if you feel unwell
P314	Get Medical advice/attention if you feel unwell
P321	Specific treatment (see first aid section on this label/SDS)
P362	Take off contaminated clothing and wash before reuse
P363	Wash contaminated clothing before reuse
P302+P352	IF ON SKIN: Wash with soap and water
P303+P361+P353	IF ON SKIN (or hair): Remove / Take off all contaminated clothing immediately. Rinse skin thoroughly with water / shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with cool water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313	If skin irritation occurs: Get medical advice/attention
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P337+P313	If eye irritation persists get medical advice / attention
P342+P311	Call a POISON CENTER or doctor/physician
P370+P378	In case of fire: Use dry chemical / CO2 / foam for extinction
P405	Store locked up
P403+P233	Store in a well ventilated area. Keep container tightly closed.
P403+P235	Store in a well ventilated area. Keep cool
P501	Dispose of contents / container to an approved waste disposal facility

**Signal Word: Danger**



#### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	CAS number	Weight Concentration %
Solvent naphtha, petroleum, light aromatic	64742-95-6	40.00% - 50.00%
4,4'-Methylenediphenyl diisocyanate	101-68-8	10.00% - 20.00%

1,3-Butanediol, polymer with 1,1'-methylenebis[isocyanatobenzene], [(1-methyl-1,2-ethanediyl)bis(oxy)]bis[propanol] and 1,2-propanediol	150449-03-9	10.00% - 20.00%
Benzene, 1,2,4-trimethyl-	95-63-6	5.00% - 10.00%
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	5.00% - 10.00%
Benzene, 1-isocyanato-2-[(4-isocyanatophenyl)methyl]-	5873-54-1	1.00% - 5.00%

## SECTION 4: FIRST AID MEASURES

**Inhalation:** Move affected person to fresh air. If breathing has stopped, administer CPR. If the person vomits, clean the airway and turn their head to the side to prevent choking. If the person is unconscious but breathing, place them stably on their left side in the recovery position. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Eyes:** Flush eyes gently with clean water for at least 15 minutes. If irritation persists, seek immediate medical attention.

**Skin:** Remove any contaminated clothing using appropriate gloves. Rinse skin thoroughly for 15 minutes in a shower or with a hose. Seek immediate medical attention.

**Ingestion:** Rinse mouth with water to remove any residual chemical. If the person vomits, clean their airway and turn their head to the side to prevent choking. DO NOT induce vomiting and DO NOT give them anything to drink unless directed to do so by a physician. If the person is unconscious but breathing, place them stably on their left side in recovery position. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

**Additional Notes to Physician** - Treat symptomatically. No specific antidote available

## SECTION 5: FIREFIGHTING MEASURES

Flash Point: 40 C (104 F)

LEL: N/A

UEL: N/A

### Suitable Extinguishing Media:

Foam

Carbon Dioxide (CO2)

Dry Chemical

**Specific Hazards During Firefighting:** Prevent firefighting run-off from entering drains or sewers.

**Byproducts of Combustion:** Fires involving this product may release oxides of carbon and nitrogen, reactive hydrocarbons, and irritating vapors.

**Unusual Fire and Explosion Hazards:** Any closed container may rupture when exposed to extreme heat. Use a water spray to cool sealed containers. Solvent vapors are heavier than air and can travel along the ground.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Spill / Leak Clean-Up Procedures:

Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in .

a manner that will prevent material from entering sewers and waterways. Large spills, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers. If a large spill occurs notify the appropriate authorities.

In case of road spill or accident contact INFOTRAC (1-800-535-5053).

**CAUTION:** If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will also be regulated.

Do not empty into drains. All disposal must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.

## SECTION 7: HANDLING AND STORAGE

### Handling Precautions:

Open containers carefully and in a well ventilated area, and use appropriate respiratory protection. Wash hands thoroughly after handling. Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers contain product residue which may exhibit hazardous properties therefore, do not pressurize, cut, glaze, weld or use for any other purpose. Return drums to reclamation center for proper cleaning and reuse.

### Storage Requirements:

Store in a cool, dry, well ventilated area. Keep containers tightly closed and store away from heat, sparks, open flame or oxidizing materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Solvent naphtha, petroleum, light aromatic 64742-95-6	Not Established	Not Established	Not Established
4,4'-Methylenediphenyl diisocyanate 101-68-8	Not Established	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	NIOSH: 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate); 0.05 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m3 Ceiling (10 min)
1,3-Butanediol, polymer with 1,1'-methylenebis[isocyanatobenzene], [(1-methyl-1,2-ethanediyl)bis(oxy)]bis[propanol] and 1,2-propanediol 150449-03-9	Not Established	Not Established	Not Established
Benzene, 1,2,4-trimethyl- 95-63-6	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA

Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	Not Established	Not Established	Not Established
Benzene, 1-isocyanato-2-[(4- isocyanatophenyl)methyl]- 5873-54-1	Not Established	Not Established	Not Established

**Engineering Controls:** Avoid creating dust or mist. Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid over exposure. Use explosion-proof ventilation equipment. Do not use in closed or confined spaces. Keep all levels below exposure limits. Perform regular monitoring to ensure exposure limits are not exceeded.

#### **Personal Protective Equipment (PPE):**

**Respiratory Protection** - Do not breathe vapors. When concentrations exceed the established limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA) until vapors are exhausted. Observe OSHA standard 29 CFR 1910.134 and ANSI Z88.2 requirements whenever workplace conditions require a respirators use.

**Hand Protection** - Wear appropriate protective gloves and clothing to prevent skin exposure. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product.

**Eye Protection** - Use safety eyewear with splash guards or side shields. Use additional eye protection such as chemical safety goggles when the possibility for eye contact from splashing, spraying liquid, or airborne material exists.

**Skin Protection** - Avoid contact with this product. Wear appropriate protective gloves and clothing to prevent skin exposure. Use proper glove and clothing removal techniques to avoid skin contact with this product. When handling large quantities, eye wash stations and deluge showers should be available.

#### **Hygiene Measures:**

**General** - When using do not eat or drink. Wash hands with soap and water before breaks and at the end of each workday.

**Contaminated Equipment** - Avoid contact with contaminated clothing and protective gear/equipment. Wash before reuse.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

This mixture typically exhibits the following properties under normal circumstances:

<b>Appearance</b> Liquid Dispersion <b>Physical State</b> Liquid <b>Lbs VOC/Gallon Less Water</b> 5.95 <b>g VOC/L Less Water</b> 712.61	<b>Odor</b> Organic Solvent <b>Specific Gravity (SG)</b> 1.020 <b>Flash point:</b> 40°C, 104°F <b>Boiling range:</b> 169°C
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### **SECTION 10: STABILITY AND REACTIVITY**

**Product Stability (under normal conditions):**

STABLE

**Incompatible Materials:** Strong acids, strong bases, oxidizing agents

None

**Hazardous Decomposition Products:** Carbon Dioxide (CO<sub>2</sub>), Carbon Monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>), dense black smoke

None

Hazardous polymerization will not occur.

**SECTION 11: TOXICOLOGICAL INFORMATION****Mixture Toxicity**

Inhalation Toxicity LC50: 1mg/L

**Note** - Toxicological studies have not been performed on this mixture. The toxicological data listed is compiled using data from the components of the mixture. Refer to Section 2 of this SDS for GHS classification of acute and chronic effects of exposure.

**Principle Routes of Exposure:**

Inhalation      Skin Contact      Eye Contact      Ingestion

**May cause damage to the following organs:**

Blood    Eyes      Central Nervous System      Skin      Respiratory System

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing) or ACGIH (optional listing):

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
101-68-8	4,4'-Methylenediphenyl diisocyanate	10% - 20%	
64742-95-6	Solvent naphtha, petroleum, light aromatic	40% - 50%	EU REACH: Present (P)

**SECTION 12: ECOLOGICAL INFORMATION****Bioaccumulative Potential:** No data available**Mobility in Soil:** No data available**Persistence and Degradability:** No data available**Component Ecotoxicity**

Solvent naphtha, petroleum, light aromatic	96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L 48 Hr EC50 Daphnia magna: 6.14 mg/L
4,4'-Methylenediphenyl diisocyanate	96 Hr LC50 Brachydanio rerio: >1000 mg/L [static] 24 Hr EC50 Daphnia magna: >1000 mg/L [static]
Benzene, 1,2,4-trimethyl-	96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through] 48 Hr EC50 Daphnia magna: 6.14 mg/L
Isocyanic acid, polymethylenepolyphenylene ester	96 Hr LC50 Brachydanio rerio: >1000 mg/L [static] 24 Hr EC50 Daphnia magna: >1000 mg/L [static]

**SECTION 13: DISPOSAL CONSIDERATIONS**

Do not discharge product into sewer system. Dispose of in a licensed facility. Waste management should be in full compliance with federal, state, and local laws.

The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Chemical additions, processing, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate.

## SECTION 14: TRANSPORT INFORMATION

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
U.S. DOT	Paint	1263	III	3

## SECTION 15: REGULATORY INFORMATION

Additional regulatory listings where applicable

**State of California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)** WARNING! This product contains the following substance(s) which are listed by the State of California as carcinogenic, or a reproductive toxin:

100-41-4 Ethylbenzene Carcinogen

**Clean Air Act, Section 112, Hazardous Air Pollutants (HAPs) (see 40 CFR 61)** This product contains the following substance(s) which are listed as hazardous air pollutants (HAPs) per the Clean Air Act:

101-68-8 4,4'-Methylenediphenyl diisocyanate

**Massachusetts Right To Know** This product contains the following toxic or hazardous substance(s) which appear on the Massachusetts Substance List:

101-68-8 4,4'-Methylenediphenyl diisocyanate

95-63-6 Benzene, 1,2,4-trimethyl-

**New Jersey Worker and Community Right to Know Hazardous Substance List** The following substance(s) appear on the New Jersey Right to Know Hazardous Substance List:

95-63-6 Benzene, 1,2,4-trimethyl-

9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester

**Commonwealth of Pennsylvania Worker and Community Right To Know Act** This product contains the following substance(s) which appear on the Pennsylvania Hazardous Substance List:

101-68-8 4,4'-Methylenediphenyl diisocyanate

95-63-6 Benzene, 1,2,4-trimethyl-

**Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)** This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40, of the Code of Federal Regulations, part 372:

101-68-8 4,4'-Methylenediphenyl diisocyanate

95-63-6 Benzene, 1,2,4-trimethyl-

9016-87-9 Isocyanic acid, polymethylenepolyphenylene ester

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
Australian	Australian Inventory of Chemical Substances	Yes
Japan	Existing and New Chemical Substances	No
China	Inventory of Existing Chemical Substances Produced	Yes
New Zealand	Inventory of Chemicals	Yes
Philippines	Philippine Inventory of Chemicals and Chemical	No
	Reach PBT/vPvB	No

**TSCA Substance Control Act (TSCA)** All substances except those listed below appear in the Toxic Substances Control Act, Chemical Substance Inventory:

- None

<b>SECTION 16: OTHER INFORMATION</b>
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**Disclaimer:** The Volatile Organic Compound (VOC) content reported herein, if any, is based on a material VOC calculation. Several methods are used for the calculation of VOC content, and the standards and requirements regarding VOC content vary by location or jurisdiction.

This document has been prepared using data from sources considered to be technically reliable and is believed to be correct as of the date hereof. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use and handling are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use, and to comply with all federal, state, provincial, and local laws and regulations.

**Revision Notes:**

Reviewer Revision

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