

Wood Restoration Epoxies & Wood Shapers

M-Balm™

Epoxy Wood Consolidator

Wood that has lost its integrity due to decay or insects can be hardened and consolidated with *M-Balm*. This two-component liquid epoxy penetrates into soft, porous or spongy wood to form a strong water-resistant mass. *M-Balm* should always be used in preparation for filling pockets of decayed wood with *E-Wood* epoxy putty.

- Two component liquid epoxy
- Low viscosity for penetration into soft, spongy and porous wood
- Forms a hard, water-resistant mass
- Should be used prior to filling pockets of decayed wood with *E-Wood*

Surface Preparation:
Apply only to dry wood.

Application Rates:
15 to 20 sq.in. per ounce of mixed M-Balm.

Application Temperature:
40° F to 90° F

Application Methods:
Squeeze bottle.
Syringe.
Small brush.

of Coats:
Thoroughly saturate wood.

Drying Time:
Do not allow to dry on wall.

Clean up:
Uncured mixed M-Balm (Part A and Part B) may be cleaned up with white vinegar then flushed with water.

Packaging:
2 component 24 oz. package.
2 component 1.5 gallon package.

Storage/Shelf Life:
Freeze/thaw stable.
1 year.



E-Wood™

Epoxy Wood Filler

For filling voids in decayed wood, *E-Wood* is the perfect product to use. *E-Wood* is a two component epoxy wood putty that may be used to fill in wood voids. It can be textured to match the appearance of the surrounding wood. Hardened *E-Wood* filler can be sanded, shaped and stained.

- Two component wood tone epoxy putty
- May be shaped, molded and textured to match the surrounding wood
- Soft or decayed wood should be consolidated with *M-Balm* first
- Hardens within 24 hours

Surface Preparation:
Should be applied after using M-Balm. No waiting is necessary.

Application Rates:
1.8 cubic inches per ounce mixed A&B components.

Application Temperature:
40° F to 90° F

Application Methods:
Press into voids using gloved hands.

of Coats:
Tool and texture within 30 minutes of application.

Drying Time:
Hardens in 2 to 4 hours depending on temperature.

Clean up:
Uncured mixed E-Wood (Part A and Part B) may be cleaned up with white vinegar then flushed with water.

Packaging:
2 component 32 oz. package.
2 component 2 gallon package.

Storage/Shelf Life:
Freeze/thaw stable.
1 year.



Product Information



The Log Home Care and
Maintenance Authority

M-Balm™

Wood Epoxy for Consolidation of Rotted Wood for Interior and Exterior Use Solvent-Free * Reinforces * Waterproof

Penetrates deeply into deteriorated and rotted wood, creating a strong, solid base for restoration. After application, a patch may be built up with E-Wood, which can be finished in a normal manner. Use for repair of rotted and deteriorated, dried out or spongy wood. Excellent for both interior and exterior use. M-Balm penetrates deep into the wood, hardening into a strong, water resistant mass.

Directions:



Mix two parts of M-Balm Epoxy (Part A) with one part of M-Balm Hardener (Part B) by volume. Mix no more that can be applied within 30 minutes. For easy measurement, use mixing/applicator squeeze bottle.

Application:

Apply to affected area with mixing/applicator squeeze bottle, syringe, brush or roller. The wood must be very dry (15% moisture content or less). Repeat if necessary.

Technique:

In extreme cases of deep rot, drill a series of holes into the decayed area and pour liberally into the affected area. Allow time for M-Balm to soak well into the area. Repeat if necessary.

Cleanup:

Uncured mixed M-Balm (Part A and Part B) may be cleaned up with white vinegar then flushed with water.

Coverage:

Depends on porosity of wood.

Packaging:

M-Balm is available in 24-oz. bottles and 1.5-gallon containers.

Drying Time:

12 to 24 hours. M-Balm cures slower in low temperatures. (Never change mixing rates to compensate for temperature.)

Shelf Life/Application Temperature:

M-Balm has a shelf life of 1 year. Application temperature is between 40° to 90°. Do not freeze!

Safety:

Always wear protective disposable gloves when using this product. Avoid skin contact. Skin sensitization may result from prolonged and repeated contact. If use causes soreness, redness, blistering, or other symptoms of irritation, stop use and see a physician immediately. Use with adequate ventilation. If eye contact occurs, flush with large quantities of water and contact a physician immediately. Do not use around open flame. If **Part A** is swallowed, induce vomiting. If **Part B** is swallowed, **Do Not** induce vomiting. **Keep out of reach of children.**

Company Stores

Washington/Western
Division
1-800-548-1231

Tennessee/Eastern
Division
1-800-548-3554

Minnesota Branch
1-877-244-6548

Colorado Branch
1-800-433-8781

Montana Branch
1-800-479-7090

Stocking Distributors

Canadian Log Home
Supply, Ontario
1-800-746-7773

Hess Log Home Supply,
PA
1-800-257-4864

Log Home Center &
Supply, IN
1-800-773-6223

Steels Industrial
Products, Ltd., B.C.
(250) 374-3151

Timeless Wood Care
Products, MI
1-800-564-2987

visit us
online
www.permachink.com

Material Safety Data Sheet



IDENTITY (As Used on Label and List)
Perma-Chink M-BALM (Part A)

Section I

Manufacture's Name Perma-Chink Systems, Inc.	Emergency Telephone Number: CHEMTREC 1-800-424-9300
Address (Number, Street, City, State, and ZIP code) 1605 Prosser Road	Telephone Number for Information: 865-524-7343
Knoxville, TN 37914	Date of Preparation 8/17/09
Preparer's Name Sean Gahan	Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Component (Specific Chemical Identity, Common Name(s))	CAS #	OSHA / PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Diglycidyl Ether of Bisphenol A (DGEBPA)	25068-38-6	None	None		>70%
Alkylglycidyl Ether	68081-84-5	None	None		<30%
Benzyl Alcohol	100-51-6	None	None		<15%

Section III – Physical/Chemical Characteristics

Boiling Point: N/A	Specific Gravity (H ₂ O = 1) 1.1 – 1.3
Vapor Pressure (mm Hg.) N/A	Melting Point N/A % Volatile (Volume)
Vapor Density (Air = 1) Heavier than air	Evaporation Rate (Water = 1) Slower than Ether
Solubility in Water Negligible	
Appearance and Odor Clear liquid with benzyl alcohol odor.	VOC (less water): None

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) > 300°F (Pensky-Martens Closed Cup)	Flammable Limitations LEL N/A UEL N/A
Extinguishing Media Foam, CO ₂ , Dry chemical, Water Fog.	
Special Fire Fighting Procedures When fighting fires, wear full protective equipment with self contained breathing apparatus. Water spray may be used to cool fire exposed containers. Toxic fumes may be evolved when this substance is burned.	
Unusual Fire and Explosion Hazards Pressure may build if containers are exposed to heat.	

Section V – Reactivity Data

Stability	Unstable	<input type="checkbox"/>	Conditions to Avoid
	Stable	<input checked="" type="checkbox"/>	N/A
Incompatibility (Materials to Avoid) Strong oxidizing agents, Lewis and mineral acids.	None Known		
Hazardous Decomposition or Byproducts	Oxides of carbon, aldehydes and acids.		
Hazardous Polymerization	May Occur	<input type="checkbox"/>	Conditions to Avoid
	Will Not Occur	<input checked="" type="checkbox"/>	Epoxy resins and epoxy hardeners react with each other to produce heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke and therefore hazardous decomposition products.

Section VI – Health Hazard Data

Routes of Entry Inhalation? Yes Skin? Yes Ingestion? Yes Eye Contact? Yes

Health Hazards (Acute and Chronic)

Slight irritation of skin, moderate irritation of eyes. Odor may irritate the nose, throat, and respiratory tract of some persons. May cause skin sensitization from prolonged and repeated contact.

Carcinogenicity? NO NTP? NO IARC Monographs? NO OSHA Regulated? NO

No long-term adverse effects are known.

Signs and Symptoms of Exposure: Conditions are generally aggravated with exposure.

Medical Conditions: None known

Emergency and First Aid Procedures:

Eye contact: Flush with large quantities of clean water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion: Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water or induce vomiting by giving 2 tablespoons of syrup of ipecac (1 tablespoon/glass of water for a child). If ipecac is unavailable, give two glasses of water and induce vomiting by touching finger to the back of the throat. Keep head below the hips while vomiting. Get medical attention.

Skin contact: Remove contaminated clothing and wipe excess from skin. Wash affected area with warm water and soap. Seek medical attention if irritation persists. Do not use contaminated clothing until clothes are cleaned.

Inhalation: Get fresh air and give oxygen if having trouble breathing. Give artificial respiration if breathing stops. Seek medical attention.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled

Avoid contact with the material. Persons not wearing the appropriate PPE should leave the area until the spill is cleaned up. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid can be soaked up with an inert absorbent material and shoveled into disposal containers.

Waste Disposal Method

Waste is not hazardous by RCRA Criteria (40 CFR 261). Dispose of material in accordance with all applicable Federal, State, and Local regulations.

Precautions to be taken in Handling and Storing

Read and Observe all product label instructions. Protect product from freezing. KEEP OUT OF REACH OF CHILDREN.

Other Precautions

Section VIII – Control Measures

Respiratory Protection (Specify Type)

Normally none is required when adequate ventilation is provided. In the absence of proper environmental control, NIOSH approved respirator is required. For emergencies, a SCBA or full faced respirator is recommended.

Ventilation : Provide adequate ventilation in work areas.
Confine material in sealed containers when not in use.

Special

Mechanical (general)

Other

Protective Gloves

Always wear impervious neoprene, vinyl or rubber gloves.

Eye Protection

Goggles or safety glasses recommended.

Other Protective Clothing or Equipment

Wear clothing to prevent skin contact.

Work/Hygenic Practices: General care and hygiene.

The information contained herein is, to the best of Perma-Chink Systems, Inc. knowledge, accurate as of the data indicated. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished on the condition that the person receiving it shall make his own determination as to the suitability of the material for his particular purpose and on the condition that he assumes the risk of his use thereof.

Material Safety Data Sheet



IDENTITY (As Used on Label and List)
Perma-Chink M-BALM (Part B)

Section I

Manufacture's Name Perma-Chink Systems, Inc.	Emergency Telephone Number: CHEMTREC 1-800-424-9300
Address (Number, Street, City, State, and ZIP code) 1605 Prosser Road	Telephone Number for Information: 865-524-7343
Knoxville, TN 37914	Date of Preparation 8/17/09
Preparer's Name Sean Gahan	Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Component (Specific Chemical Identity, Common Name(s))	CAS #	OSHA / PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Modified Aliphatic Amines (Trade Secret)	Unknown	None	None		>80%
Benzyl Alcohol	100-51-6	None	None		<15%

Section III – Physical/Chemical Characteristics

Boiling Point: N/A	Specific Gravity (H ₂ O = 1) 0.95 – 1.05
Vapor Pressure (mm Hg.) N/A	Melting Point N/A % Volatile (Volume)
Vapor Density (Air = 1) Heavier than air	Evaporation Rate (Water = 1) Slower than Ether
Solubility in Water Negligible	
Appearance and Odor Amber liquid with characteristic odor.	VOC (less water): None

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) > 250°F (Pensky-Martins Closed Cup)	Flammable Limitations LEL N/A UEL N/A
Extinguishing Media Foam, CO ₂ , Dry chemical, Water Fog.	
Special Fire Fighting Procedures When fighting chemical fires, wear full protective equipment with self contained breathing apparatus. Water spray may be used to cool fire exposed containers. Toxic fumes may be evolved when this substance is burned.	
Unusual Fire and Explosion Hazards Pressure may build if containers are exposed to heat.	

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	✓	Epoxy resins and epoxy hardeners react with each other to produce heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke
Incompatibility (Materials to Avoid) Strong oxidizing agents, mineral acids.			None Known
Hazardous Decomposition or Byproducts			Oxides of carbon, nitrogen.
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	✓	

Section VI – Health Hazard Data

Routes of Entry Inhalation? Yes Skin? Yes Ingestion? Yes Eye Contact? Yes

Health Hazards (Acute and Chronic)

May cause burns to skin and eyes. High vapor concentration can cause severe irritation to eyes and respiratory tract. Liquid causes severe damage to mucous membranes if swallowed. Prolonged and repeated skin contact may cause skin sensitization or other allergic reactions.

Carcinogenicity? NO NTP? NO IARC Monographs? NO OSHA Regulated? NO

No long-term adverse effects are known.

Signs and Symptoms of Exposure:

Medical Conditions: Conditions are generally aggravated with exposure. This material may be a strong skin sensitizer in certain susceptible persons. Once sensitized, most persons are unable to work around amine cured epoxy resins without an allergic reaction. No other health problems are known.

Emergency and First Aid Procedures:

Eye contact: Flush with large quantities of clean water for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion: Do not induce vomiting. Give milk or water to dilute to conscious victims only. Seek medical attention.

Skin contact: Remove contaminated clothing and flood with water. Wash affected area with warm water and soap. Seek medical attention if irritation persists. Do not use contaminated clothing until clothes are cleaned.

Inhalation: Get fresh air. Seek medical attention if problem persists.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled

Avoid contact with the material. Persons not wearing the appropriate PPE should leave the area until the spill is cleaned up. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid can be soaked up with an inert absorbent material and shoveled into disposal containers.

Waste Disposal Method

Waste is not hazardous by RCRA Criteria (40 CFR 261). Dispose of material in accordance with all applicable Federal, State, and Local regulations.

Precautions to be taken in Handling and Storing

Read and Observe all product label instructions. Protect product from freezing. KEEP OUT OF REACH OF CHILDREN.

Other Precautions

Section VIII – Control Measures

Respiratory Protection (Specify Type)

Normally none is required when adequate ventilation is provided. In the absence of proper environmental control, NIOSH approved respirator is required. For emergencies, a SCBA or full faced respirator is recommended.

Ventilation: Provide adequate ventilation in work areas. Confine material to sealed containers when not in use.	Special
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Mechanical (general)	Other
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Protective Gloves Always wear impervious neoprene, vinyl or rubber gloves.	Eye Protection Splash proof goggles or safety glasses with side shields are recommended. Always wear eye protection when sanding cured epoxy resins to avoid dust in the eyes.
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Other Protective Clothing or Equipment

Wear clothing to prevent skin contact.

Work/Hygenic Practices: General care and hygiene.

The information contained herein is, to the best of Perma-Chink Systems, Inc. knowledge, accurate as of the data indicated. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished on the condition that the person receiving it shall make his own determination as to the suitability of the material for his particular purpose and on the condition that he assumes the risk of his use thereof.