

# MIGHTY MAC BRAND

*Environmentally Friendly*

# EF Zinc-Free Floor Finish

MICHCO



Sustainable  
Certified

## DESCRIPTION

An environmentally preferable Zinc-free floor seal and finish formulated with the most advanced polymer technology. Meets today's need for a product that contains no zinc or other heavy metals that can be harmful to wastewater treatment systems. This low odor finish has exceptional durability and flexibility and can be maintained with scrub and recoat procedures, spray buffing or high speed burnishing.

## DIRECTIONS

**PREPARATION:** If stripping is necessary, use a high quality stripper and follow directions accordingly. If floor is in good condition and stripping is not necessary, sweep up excess dirt and dust and then clean with a good quality cleaner to remove dirt and oils. Follow with a thorough rinsing and allow floor to dry completely.

**FINISHING:** Apply 3 or 4 liberal coats of seal and finish using a clean mop. Allow a minimum of 45 minutes drying time between coats. Apply additional coat to obtain desired gloss.

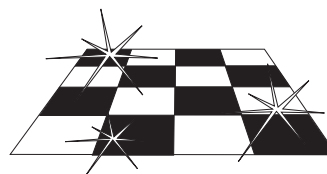
**BURNISHING:** Dust mop or sweep thoroughly. Clean floor with a neutral floor cleaner diluted according to directions. Burnish using the appropriate pads.

**RESTORATION:** Dust mop or sweep thoroughly. Dilute restorer according to manufacturers direction and apply to floor with clean mop or auto-scrubber. Allow to dry to a haze and buff out with any type of UHS equipment-propane, battery, or electric.

**RECOATING:** Dust mop or sweep thoroughly. Deep scrub using a neutral floor cleaner diluted according to directions. Apply 1 or 2 liberal coats of finish using a clean mop.

## PRODUCT SPECIFICATIONS

Non-volatile Solids:	20.0 ± 0.5%
Color:	Milky emulsion
Odor:	Low
pH:	8.0 – 9.0
Dry/Recoat Time:	45 minutes min.
Slip Resistance:	0.5 min. by ASTM-D2047
Durability:	Excellent
Buffability:	Spray buffing or high speed burnishing
Removability:	With instant type strippers
Detergent Resistance:	Excellent
VOC Content:	0.34 lbs./gal.
Storage/Stability:	1 year
Weight Per Gallon:	8.50 lbs./gal.
Freeze/Thaw Stability:	Keep from freezing



Reorder#  
**95-0440**



**SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION**

**Product Name:** EF Zinc-Free Floor Finish  
**Generic Name:** Floor Finish  
**Chemical Family:** Acrylic Wax Blend  
**Formula:** Proprietary

**Suppliers Name:** Michco  
**Suppliers Address:** 2011 N. High St., Lansing, MI 48906  
**Suppliers Website:** www.Michco.com

**SECTION 2-INGREDIENT INFORMATION**

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Zinc-Free Acrylic Copolymer Dispersion	N/A	45 to 50			
Modified Propylene Copolymer	25722-45-6	0 to 5			
Oxidized Polyethylene	68441-17-8	0 to 5			
Tributoxyethyl Phosphate	78-51-3	0 to 5			
Diethylene Glycol Ethyl Ether	111-90-0	0 to 5			

**SECTION 3-PHYSICAL DATA**

**Boiling Point (°F):** 212 F.  
**Vapor Pressure:** <20mm Hg @ 68 F.  
**% Volatile:** 75+  
**Solubility in Water:** Complete  
**Physical Description:** Thin milky liquid with characteristic odor.  
**VOC Content (% wt.):** 0.34 lbs./gal.

**Specific Gravity:** 1.020

**Vapor Density (Air=1):** =1

**pH:** 8.0 – 9.0

**Evaporation Rate (Water=1):** <1

**SECTION 4-FIRE AND EXPLOSION HAZARD DATA**

**Flash Point (Method Used):** None  
**Upper Explosion Limit:** N/A  
**Lower Explosion Limit:** N/A  
**Extinguishing Media:** N/A  
**Special Firefighting Procedures:** Non Flammable  
**Unusual Fire and Explosion Hazards:** N/A

**SECTION 5-REACTIVITY DATA**

**Stability:** Stable

**Hazards Decomposition Products:** Will not occur

**Hazardous Polymerization:** None

**Incompatibility (Materials to Avoid):** None

**SECTION 6-STORAGE AND HANDLING INFORMATION**

Keep out of reach of children. For use by trained personnel only. Keep unauthorized personnel away when applying to floor. Keep container closed during storage. For institutional and industrial use only. Avoid contact with eyes, skin and clothing. Avoid breathing of vapors. Use in well-ventilated area.

**SECTION 7-HEALTH HAZARDS AND FIRST AID**

**Effects of Overexposure:**

**Skin:** Prolonged or repeated contact may cause dermatitis.

**Eyes:** Eye irritant. May cause redness or swelling.

**Inhalation:** Prolonged exposure may cause dizziness, headache, nausea.

**Ingestion:** May be irritating to the mouth, throat, and gastrointestinal system.

Vomiting and diarrhea expected with large doses.

**First Aid Procedures:**

**Skin:** Flush with water. Seek medical attention if irritation persists.

**Eyes:** Flush with large quantities of water, holding eyelids open. Seek medical attention.

**Inhalation:** Remove victim to fresh air and monitor. Seek medical attention if symptoms persist.

**Ingestion:** Dilute with 2 glasses of water. Seek medical attention if symptoms persist.

**SECTION 8-SPECIAL PROTECTION INFORMATION**

**Respiratory Protection:** Use in well-ventilated areas only.

**Ventilation Requirements:** Provide local exhaust to keep TLV of Section 2 ingredients below acceptable limit.

**Protective Gloves:** Rubber or chemical resistant.

**Eye Protection:** Safety glasses or chemical splash goggles

**Other Protective Equipment:** Chemical resistant footwear e.g. rubber boots to protect feet. Long pants to protect legs.

**SECTION 9-SPILL OR LEAK PROCEDURES**

**Steps to be taken in Case Material is Released or Spilled:** Floors will become slippery. Avoid walking in product. Keep unessential personnel away. Mop up or otherwise absorb and hold disposal. Avoid discharge to sewer or open waterways.

**Waste Disposal Method:** Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before offering for recycling.

**SECTION 10-REGULATORY INFORMATION**

**SARA Title III - Section 311/312 -Hazard Categories:**

No - Fire Hazard

No - Sudden Release of Pressure Hazard

No - Reactivity Hazard

Yes - Immediate (acute) Health Hazard

No - Delayed (chronic) Health Hazard

**Shipping Information:**

FOR CONTAINERS > 1 Gallon : Liquid Floor Wax

FOR 1 GALLON CONTAINERS : Liquid Floor Wax

FOR CONTAINERS < 1 GALLON : Liquid Floor Wax

**HMIS Hazardous Materials Identification System**

<b>Health</b>	<b>1</b>
<b>Flammability</b>	<b>0</b>
<b>Reactivity</b>	<b>0</b>
<b>Personal Protection</b>	<b>A</b>

**FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION:** CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
	None	

This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.

CAS#	Chemical Name	Percent by Weight
	None	

**SECTION 11-OTHER INFORMATION**

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product