

E³

Environmental • Effective • Economical

Zinc Free Floor Finish

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.



ENVIRONMENTALLY RESPONSIBLE COMPARISON

Traditional Products	E ³
Zinc cross-linked acrylic and modified-acrylic emulsion polymer	None
Formaldehyde	None
	Zinc-free cross-linked polymers
	1,2-benzisothiazoline-3-one
Traditional Compound Descriptions:	E ³ Compound Descriptions:
<p>Zinc cross-linked acrylic and modified-acrylic emulsion polymer – is used as a binder in floor finish and sealers. Trace amount of zinc may cause problems with toxicity of sewage effluent and meeting discharge permit requirement.</p> <p>Formaldehyde – is commonly used as a preservative in coatings as well as detergents. However, it is a suspect carcinogen.</p>	<p>Zinc-free cross-linked polymers – is used as a binder in floor finish and sealers. It reduces toxicity of sewage effluent.</p> <p>1,2-benzisothiazoline-3-one – is an efficient microbiostat preservative for aqueous compositions such as floor finish and sealers. Low corrosivity and low odor. It is not suspected carcinogens.</p>

PRODUCT SPECIFICATIONS

Non-volatile Solids:	20.0 ± 0.5%	Buffability:	Spray buffing or high speed burnishing
Color:	Milky emulsion	Removability:	With instant type strippers
Odor:	Low	Detergent Resistance:	Excellent
pH:	7.1	VOC Content:	1.0%
Dry/Recoat Time:	20 minutes min.	Storage/Stability:	1 year
Slip Resistance:	0.5 min. by ASTM-D2047	Weight Per Gallon:	8.61 lbs./gal.
Durability:	Excellent	Freeze/Thaw Stability:	Keep from freezing



Cavalier Inc.

PO Box 11171 Norfolk, Va. 23517
Phone: 757-855-6091 Fax: 757-855-1818

PRODUCT SAFETY SHEET

SECTION 1. PRODUCT/MANUFACTURER'S IDENTITY

PRODUCT NAME: E3 Zinc Free Floor Finish

PRODUCT I.D. NUMBER (PIN): N.A.

PRODUCT USE: Floor Finish

WHMIS CLASS: D2B

H.M.I.S.

COMPANY:

CAVALIER, INC.
P.O. BOX 11171
NORFOLK, VA 23517

DOT HAZARD CLASS: Non-Regulated

DOT SHIPPING NAME:
N.A.

	HEALTH	HAZARD RATING
1	FIRE	4 = Extreme
0	REACTIVITY	3 = High
0	MAXIMUM PERSONAL PROTECTION	2 = Moderate
B		1 = Slight
		0 = Insignificant

EMERGENCY PHONE: 800-843-6174

A = Goggles B = Goggles & Gloves C = Goggles, Gloves & Apron

ABBREVIATION KEY: N.A. - Not Applicable N.E. = Not Established N.D. = Not Determined

SECTION 2 - HAZARDOUS INGREDIENTS INFORMATION

HAZARDOUS CHEMICAL IDENTITY	CAS NO.	%	PEL	TLV	LD50	LC50
Water	7732-18-5	40-60	N.E.	N.E.	N.D.	N.D.
Acrylic Copolymer	N.A.	30-40	N.E.	N.E.	N.D.	N.D.
2-(2-ethoxyethoxy)ethanol	111-90-0	1-5	N.E.	N.E.	5500 uL/kg (Rat)	N.D.
(2-methoxymethylethoxy)propanol	34590-94-8	0-1	100 ppm 8 hours	150 ppm 15 min.	5.5 ml/kg (Rat)	N.D.

This mixture does not contain components which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR, Part 372.

SECTION 3 - PHYSICAL DATA

Color: Milky	Boiling Point: 100°C (212°F)	Vapor Pressure: <30 mm of Hg	pH: 7.1
Odor: Bland	Freezing Point: 0°C (32°F)	Vapor Density (Air=1): <1	1% pH: N.A.
Physical State: Liquid	Water/Oil Distribution: N.E.	Evaporation Rate (Water=1): N.E.	Specific Gravity: 1.03 gm/ml
Solubility in Water: Miscible	Odor Threshold: N.E.	VOC Content: 1.0%	Weight per Gallon: 8.61 lbs./gal.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method: N.A.	Autoignition Temperature: N.A.	Extinguishing Media: Use dry chemical or CO2.
Flammable Limits: N.A.	LEL: N.A. UEL: N.A.	Special Fire Fighting Procedures: None.
Hazardous Combustion Products: N.A.		Unusual Fire and Explosion Hazards: None.

SECTION 5 - REACTIVITY DATA

Chemical Stability: Stable.	Hazardous decomposition of By-Products: None known.
Incompatibility (Materials to Avoid): None known.	Hazardous Polymerization: Will not occur.

SECTION 6 - TOXICOLOGICAL PROPERTIES

Routes of Entry: Ingestion.	Toxicologically Synergistic Products: None known.
Sensitization: No.	Medical Conditions Aggravated by Exposure: None known.
EFFECTS OF OVEREXPOSURE (Acute and/or Chronic):	
Eyes: Direct contact may cause irritation.	Carcinogenic Effects: NO carcinogenic effect.
Skin: Prolonged or repeated contact may cause irritation.	Mutagenic Effects: NO mutagenic effect.
Ingestion: May cause gastrointestinal irritation, nausea, diarrhea.	Teratogenic Effects: NO teratogenic effect.
Inhalation: Non-hazardous in the case of inhalation.	Reproductive Toxicity: NO reproductive toxicity effect.

SECTION 7 - PREVENTATIVE AND CONTROL MEASURES

Respiratory Protection: None normally required with adequate ventilation.	Ventilation: Local Exhaust: N.A. Mechanical: N.A.
Protective Gloves: Rubber if needed to protect sensitive skin.	Eye Protection: As required to prevent splashing into eyes.
Protective Clothing and Equipment: As needed to prevent wetting of clothing.	Work and Hygienic Practices: Avoid contact with eyes, skin and clothing.
Storage Requirements: Store in cool, dry area. Follow good housekeeping practices.	Other Requirements: Keep out of reach of children.

Steps to be Taken if Material is Spilled or Released: Collect and reuse if possible. Flush to sewer with large quantities of water if permitted by regulatory authorities or absorb on inert material (sand, clay, etc.) and place into container for proper disposal. Do not allow runoff into public waterways.

Waste Disposal: Dispose of as permitted by all federal, provincial, state and local regulatory authorities.

SECTION 8 - EMERGENCY FIRST AID PROCEDURES

FIRST AID - NOTES TO PHYSICIAN:

Eyes: Flush with a large amount of water for 15 minutes holding eyelids open.

Skin: Wash with mild soap and water.

Ingestion: Give 2-3 large glasses of water. Seek medical attention.

Inhalation: Non-hazardous in the case of inhalation.

Note to Physician: No additional information.

SECTION 9 - PREPARATION INFORMATION

Prepared By: Regulatory Affairs Department

Phone: 775-885-6091