# Gem-Cote<sup>TM</sup> VR WB Vapor Retarder Water based

#### **MANUFACTURER**

# Gemite® Products Inc.

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# **FEATURES**

- Vapor Retarder / Sealer
- Mixes easily resin with water
- Excellent adhesion to green concrete
- Brushed, rolled or spray applied
- No odor
- Quick drying
- Zero VOC
- Low viscosity
- Fast cure
- Excellent penetration
- Easy to clean tools with water
- Not regulated for transportation

# PRODUCT DESCRIPTION

#### **Basic Use**

Gem-Cote VR WB is a water vapor retarder with excellent adhesion and penetration to green concrete. It is also used as a sealer for old and new concrete for foot traffic.

Excellent for indoor use, since it contains No VOC + virtually no odor, unlike solvent based epoxy sealers.

Consult Gemite Technical Service when applying solvent containing coatings over Gem-Cote VR WB. It is not designed as finish, traffic bearing coating.

# **Composition and Materials**

Gem-Cote VR WB is a two component water borne epoxy. It consists of resin (Component A) and waterborne curative (Compo- INSTALLATION nent B). The additional deionized water is added after mixing the Surface Preparation Components A and B.. When mixed and applied, it provides a thin, clear sealer.

#### Limitations

Do not apply Gem-Cote VR WB when ambient surface temperatures are below 10°C (50°F) and above 32°C (90°F). Consult Gemite Technical Service for advice when using over previously treated substrate.



# Health and Safety

Gem-Cote VR WB is nonflammable & not dangerous goods for transportation. Use safety goggles & chemical resistant gloves. If contact with skin occurs, wash with water. Harmful if digested. Keep the product out of reach of children. FOR INDUS-TRIAL USE ONLY. Consult SDS for additional information.

#### Colors

Gem-Cote VR WB turns clear after drying and curing.

### **Packaging**

Gem-Cote VR WB is supplied as 3.78 L (1 USG) kit - Comp. A 1.6 L (0.43 USG) plus Comp. B 2.2 L (0.57 USG).

Gem-Cote VR WB coverage is 9.2-11 m<sup>2</sup>/L (375-450 ft<sup>2</sup>/USG), after adding deionized water. The coverage is only given as guideline and depends greatly on the roughness and porosity of the substrate & application method used. Carry out field application to determine exact material requirements.

# Storage and Transportation

Shelf life of materials in unopened containers is 1 year. Store in temperatures between 18-29 °C (65-85°F). Must not freeze.

## TECHNICAL DATA (7 days cure at 24°C - 77°F)

Solids by volume after mixed with water	47%
Volatile organic content -VOC	0 g/L
Pot Life at 24°C (77°F)	1 hour
Tack free at 24°C (77°F)	4-5 hours
Foot traffic	7-8 hours
All traffic	24 hours
Recoat time at 24°C (77°F)	6-8 hours
Mix Ratio per USG	Part A 0.426 USG, Part B 0.574 USG

Gem-Cote VR WB can be applied to fresh concrete 24 hours after finishing. Concrete can be damp, but not wet (NO visible puddles). Previously treated substrates must be cleaned using grinding, or mild shotblast - contact Gemite Technical Service for advice.

### Mixing

Mix Comp. A (resin) into Comp. B (curative) thoroughly using mixing paddle suitable for epoxy & slow speed mixer (below 400 rpm).

Add in 2 L (0.5~USG) of deionized water per kit - add slowly in four 0.5~L~(0.3~USG) parts, while mixing. Make sure that each portion is well mixed before adding the next one to avoid aeration of the mix. Mix until you see clear liquid - approx. 5 minutes in total. Once mixed, use all the materials.

# **Application**

Apply one coat of *Gem-Cote VR WB* by brush, roller or squeegee at the rate of  $9.2\text{-}11 \text{ m}^2/\text{ L}$  (375-450 ft²/ USG) - after adding deionized water. Avoid puddling and back-roll. Back-roll again in 20 minutes, if pinholes are present. Do NOT leave any areas untreated. Provide good ventilation to allow for air exchange during curing/drying.

Examine the surface thoroughly for pinholes and continuity of the film. Apply second coat, if required, after the 1<sup>st</sup> coat cures for at least 8 hours. Do not apply touchups or the second coat later than 24 hours.

Since performance characteristics vary from project to project, always test water vapor transmission after installation of *Gem-Cote VR WB* to ensure that it has been reduced to required levels, prior to application of non-breathable layer.

Maximum recoat time (adhesives included) is 5 days, providing that no dust or other contaminants are present.

# Curing

*Gem-Cote VR WB* needs approx. 8-10 hours curing, depending on temperature and relative humidity.

Clean tools and equipment immediately after use with water. For dry material use MEK or xylol.

#### AVAILABILITY AND COST

Available worldwide. Contact Gemite for the name of the nearest Representative / Distributor and pricing.

#### MAINTENANCE

No maintenance required.

#### WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For complete details contact Gemite's Head Office.

#### TECHNICAL SERVICE

For advice on suitability of *Gem-Cote VR WB* for a specific job, specification assistance and application advice contact Gemite Technical Service USA 888-443-6483 or Canada 905-672-2020.

# **Short Specification**

The vapor retarder / sealer will be *Gem-Cote VR WB*, a water based epoxy sealer manufactured by Gemite Products Inc. [USA 888-443-6483] [Canada 905-672-2020]. It will meet all the Technical Data specified in the current *Gem-Cote VR WB* Data Sheet.