



**BORDER**  
CONSTRUCTION SPECIALTIES

# PRODUCT DATA SHEET

## BORDER FILM

### EVAPORATION RETARDANT

**Description:** BORDER FILM Evaporation Retardant is an economical, high-quality, water-based compound. It is specifically designed to form a thin monomolecular film to reduce rapid moisture loss from the concrete surfaces prior to curing. BORDER FILM provides a significant aid in producing high-quality concrete flatwork. Rapid evaporation of water is retarded, slab surface conditions are normalized, and workers can adhere more closely to establish finishing schedules. BORDER FILM is also VOC-compliant.

BORDER FILM significantly reduces plastic shrinkage and cracking, wind crusting, stickiness, and sponginess, which often cause poor and uneven surface texture. These conditions result when the hydration is more rapid than the movement of bleed water to the surface. BORDER FILM effectively combats and minimizes the effects of rapid drying conditions such as low humidity, low dew point, high winds, direct sunlight, hot weather, heated concrete or placement of concrete in a heated enclosure or interior area during cold weather. The protective film shield disappears as soon as the concrete is no longer plastic.

**Use** BORDER FILM is ideal for use as an evaporation retardant for concrete surfaces where the evaporation rate exceeds the rate of bleeding. It can also be used with condensed silica fume concrete, concrete containing fly ash and most other cementitious products. When applying surface hardeners, BORDER FILM can be used after screeding and after the first floating operation if necessary.

NOTE: BORDER FILM is specifically designed to fight off the destructive effects of early rapid evaporative moisture loss. Early rapid evaporative moisture loss is addressed in ACI Committee 305R-91, entitled "Recommended Practice for Hot Weather Concreting." This report contains a chart on Page 5 that depicts the effect of concrete and air temperatures, relative humidity and wind velocity on the rate of evaporation of surface moisture from concrete. It provides a graphic method for estimating the loss of surface moisture for various weather conditions.

### Features and Benefits

- Significantly reduces plastic shrinkage and cracking caused by evaporation in low humidity, high temperature and high winds
- Allows use of lower slump & lower water:cement ratio concrete

- Provides smooth and durable concrete flatwork
- Reduces wind crusting, stickiness, and sponginess which often cause poor and uneven surface texture
- Allows finishing crews to adhere to established schedules
- Reduces overall cost because timing of finishing operations is less critical
- VOC-compliant
- Helps minimize surface cracking due to early water loss of silica fume concrete
- Available in exclusive, easy-to-use, 45-ounce container.

**Packaging** 45 Ounce (1,596.9 cu. cm) Containers 1 Gallon (3.8 liters) Units 5 Gallon (18.93 liters) Pails 55 Gallon (208 liters) Drums

**Coverage** One gallon (3.8 liters) of BORDER FILM mixed with 9 gallons (34.2 liters) of water will cover 2,000 - 4,000 sq.ft. (50 - 100 sq.m./L). Quantity needed will increase if additional coats are required. 45 ounce (1,596.9 cu. cm) container - pour into a 3-1/2 gallon sprayer, add water and it is ready-to-use.

## Application

**STEP 1** - For the majority of applications, BORDER FILM should be mixed at a ratio of one (1) part BORDER FILM to nine (9) parts of water. Agitate BORDER FILM before mixing with water. Agitate the diluted solution, again, before applying. NOTE: BORDER FILM is available in an easy-to-use, exclusive 45-ounce container. Just pour into 3-1/2 gallon sprayer, add water to fill and go to work.

**STEP 2** - Apply BORDER FILM with a commercial sprayer. Use a Chapin 8005, or equivalent spray tip that produces a flow rate of 1/2 gallon per minute.

**STEP 3** - The BORDER FILM diluted solution should be applied immediately after screeding and/or between finishing operations, as needed. Application is simplified by the fugitive pigment, which will disappear completely upon drying. Do not allow puddling. If puddling occurs, wipe up immediately and rinse with water.

**STEP 4** - Clean all equipment immediately after use with soap and water.

**STEP 5** - Finish concrete surface as required.

**STEP 6** - Cure concrete after bleed water or excess surface water has dissipated. The use of BORDER FILM does not negate the need for a quality concrete curing or sealing compound from W. R. MEADOWS.

**Note** The residue remaining on the surface after finishing will not impair bonding or alter color. The protective shield usually lasts as long as the concrete is plastic. Therefore, all concrete surfaces must be properly cured, as well.

**Precautions** DO NOT USE BORDER FILM as a finishing aid for cementitious materials, including dry shake surface hardeners or toppings. BORDER FILM should not be worked into the concrete surface, nor should it be used to re-temper the concrete. BORDER FILM should not be applied during final troweling operations. BORDER FILM is not a curing agent.

BCS is not responsible for compatibility or results, when BORDER FILM is used with other manufacturer's products.

Read and follow application information and use in accordance with the Health and Safety information shown on the container label. Refer to [Material Safety Data Sheet](#) for complete health and safety information.

This material last updated April 2008