



# ChemMasters

SPECIALTY CONSTRUCTION PRODUCTS

## CHEMFLOW HS

TRAFFIC GRADE SELF-LEVELING FLOOR  
RESURFACER AND OVERLAYMENT

### P R O D U C T D A T A

#### DESCRIPTION

ChemFlow HS is a cementitious, self-leveling floor resurfacer designed for interior structural floors. It is a single component, traffic grade product.

#### USES

- Level existing, interior concrete floors
- Smooth rough surfaces on new poured-in-place or precast concrete floors
- Repair of severely spalled or deteriorated floors in industrial or commercial applications

#### ADVANTAGES

- Nonshrink with excellent bond and flexural strengths
- Self-leveling from featheredge to 4 inches/ 10 cm
- Accepts foot traffic in 4 hours for rapid turnaround
- Does not contain gypsum, will not dust or powder
- Reduces labor costs, may be pumped with standard equipment for ease in placement
- Compatible with most tile and carpet adhesives, polymer and acrylic coatings
- Approved by the Ceramic Tile Institute

#### PACKAGING AND ESTIMATING GUIDE

ChemFlow HS is packaged in 50 pound/22.7 Kg bags, shipped 60 bags per pallet. ChemFlow Primer must be ordered separately.

Each ChemFlow HS bag covers approximately:

|                                   |                               |
|-----------------------------------|-------------------------------|
| 55 Ft. <sup>2</sup> at 0.125 in.  | 5 M <sup>2</sup> at 0.32 cm   |
| 27.5 Ft. <sup>2</sup> at 0.25 in. | 2.5 M <sup>2</sup> at 0.64 cm |

For estimating purposes, each undiluted gallon/3.785 liters of ChemFlow Primer covers 300-400 Ft.<sup>2</sup> / 7-10 M<sup>2</sup>

#### TECHNICAL DATA

|                                     |                 |             |
|-------------------------------------|-----------------|-------------|
| Working Time                        |                 | 20 minutes  |
| Application Temperature             | 50°-90°F        | 10°-32°C    |
| Abrasion Resistance (ASTM C-944)    |                 | 1.0 grams   |
| Compressive Strength (ASTM C-109)   |                 |             |
| 28 days                             | 5500 psi        | 38 MPa      |
| Flexural Strength (ASTM C-348)      |                 |             |
| 28 days                             | 1150 psi        | 8 MPa       |
| Set Times (ASTM C-191/Vicat Method) |                 |             |
|                                     | Initial         | 30 minutes  |
|                                     | Final           | 90 minutes  |
| Water Requirements per bag          |                 |             |
|                                     | 1 U.S. Gallon   | 3.8 liters  |
| Hard Dry Time                       |                 |             |
|                                     | Light Traffic   | 12-24 hours |
|                                     | Wheeled Traffic | 48 hours    |

#### DIRECTIONS

**SUBSTRATE PREPARATION:** Remove unsound concrete, including loose, frozen, broken or carbonated surfaces, curing or sealing compounds or coatings using Blastrac, Porta-Shot-Blast or Bartell surface removal equipment. Fill large cracks, holes and voids with ChemMasters SpeedPatch or ChemPatch F/S 36-48 hours prior to underlayment placement. Contraction and control joints must be maintained through the underlayment. Mark their location for later saw cutting of the ChemFlow HS.

Ceramic and quarry tile, terrazzo, wood and tile or cutback covered surfaces require special attention. Consult ChemMasters Technical Services Department for specific recommendations.

**PRIMING:** Mix ChemFlow Primer 1: 1 by volume with clean, potable water and apply to clean, dry prepared surface with a broom, brush or short napped roller at a rate of 200 Ft.<sup>2</sup> per gallon/ 5 M<sup>2</sup> per liter. Apply an even coat removing any puddles. Very porous surfaces may require a second coat of primer once the first coat has dried to fully seal the floor. Allow primer to dry to touch completely. Keep primed surface clean and protected from abrasion. Place ChemFlow HS within 48 hours of priming



### ChemMasters

An American Owned & Operated Company  
300 EDWARDS STREET • MADISON, OHIO 44057-3112  
(440) 428-2105 • FAX (440) 428-7091 • ORDER LINE: (800) 486-7866

Revised 6/15/99

RPR-12

#### **HAND MIXING/ HAND POUR:**

**TOOLS:** Mixing barrel, gauged spreader, porcupine roller and 0.50 in./1.3 cm or larger, heavy duty drill fitted with a mixing prop or jiffler blade.

**LABOR:** A typical application requires 2-3 men.

**MIXING:** Mix each 50 lb/22.7 Kg bag of ChemFlow HS with exactly 1 U.S. gallon/3.8 liters potable water. **DO NOT OVER WATER.** Mix two bags at a time. Add ChemFlow HS to the water in the barrel at a steady rate while mixing with a drill and paddle. Mixing for 2-3 minutes should achieve a lump-free mix.

**POUR:** Pour the ChemFlow HS from the mixing barrel onto the area to be leveled. Spread out using gauged spreader tool set to the desired depth. Use spiked roller to disperse air bubbles. Repeat mixing and pouring until installation is complete. Use smoother for touchups. To avoid low spots between pours, pour into leading edge of previous pour before initial set and spread.

Maximum thickness of ChemFlow HS in a neat system is 1.25 in.-3 cm. From 0.50 - 1.25 in / 1.3-3 cm, ChemFlow HS may be extended with up to 25 lbs/ 11.3 Kg of coarse sand. Beyond 1.25 in. - 3 cm, ChemFlow HS must be extended with up to 25lbs/11.3 Kg of 0.25-0.375 in. / 0.6-1 cm clean, SSD pea gravel. Add aggregate extension following initial mixing, and blend until evenly dispersed throughout batch. The addition of aggregate reduces flow and leaves a rougher surface. Do not add additional water to increase flow.

**PUMP APPLICATION:** For specific pump methods and installation, contact ChemMasters for recommendations. Generally ChemFlow HS is pumped through a hose to the application site. The applicator lays down a succession of 3-6 in./ 7.6-15 cm ribbons of material pumping into the leading edge of the preceding section. Depending on the pump used, 10,000-50,000 Ft.<sup>2</sup>/ 900-4500 M<sup>2</sup> at 0.25 in./ 0.6 cm can be placed per day. Use within 20 minutes of mixing. For best results ambient and surface temperatures should be between 50° - 90°F./ 10°-32°C.

#### **CLEAN-UP**

Clean tools and equipment before material dries and hardens with water.

#### **STORAGE**

Store unopened bags in cool, dry area on pallets. Shelf life is one year from date of manufacture. Do not allow ChemFlow Primer to freeze.

#### **LIMITATIONS**

- Exposure to direct sunlight and draft should be avoided during and shortly after placement of ChemFlow.
- Follow standard concrete placement practices in very cold or very hot temperatures.
- Do not place when air or surface temperature is below 45°F./ 6°C.
- ChemFlow HS cures rapidly and can generally be sealed or coated with an acrylic or polymer type material in 4-7 days depending upon temperature and humidity
- ChemFlow HS is formulated for interior use only. Do not place in areas subject to freeze/thaw cycling

#### **CAUTIONS**

Causes irritation to eyes. Causes skin irritation, sensitization or chemical burns. Respiratory tract irritant. Use with adequate ventilation. Do not take internally. Keep out of the reach of children.

Blastrac, manufactured by Wheelabrator Corporation, Shenandoah, GA

Porta Shot-Blast, manufactured by Nelco Manufacturing Corporation, Oklahoma City, OK

Bartell Surface Removal Systems, manufactured by Bartell Power Products, Batavia, NY

#### ***This Product is Formulated and Labeled for Industrial and Commercial Use Only***

*FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT*

*We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.*