

## PHS

### Product sheet

#### Product description

PHS is a two-component, solvent-free, epoxy-based primer. The product has a low viscosity and good penetrative capacity.

#### Uses

PHS can be used to reinforce old porous concrete and acts as an injection plastic.

#### Environment & Health

PHS is a solvent and nonylphenol free product, and practically odourless during application. Follow the appropriate Occupational Health and Safety guidelines applicable to the location where the application is undertaken. For more information, please refer to the safety datasheets for the individual components.

#### NOTE!!

**When the PHS Base is mixed with the Hardener a very exothermic reaction starts** (i.e. much heat is generated).

As with all epoxy resins, once mixed the PHS mix should always be used quickly to dissipate the heat of reaction.

If the PHS mix is not applied within 10 - 20 minutes, a lot of black smoke **will** be generated.

#### Preventative measures:-

Practical measures should be implemented to prevent the mix smoking:-

- Decant into smaller containers.
- Use quickly once mixed.
- **DO NOT** leave containers with unused mixed resin to stand (e.g. at break times, end of job etc.).
- Have a supply of dry silica sand adjacent to mixing area to dampen reaction in the event of smoke generation.
- Add dry silica sand to any mixed PHS that is unused.
- Ensure the route to outside is known and clear of obstructions.

#### ACTION IN THE EVENT OF SMOKE GENERATION:-

Where safe to do so the following actions should be considered:-

- If possible pour dry silica sand into container to absorb resin and heat.
- **DO NOT ATTEMPT TO COOL WITH WATER**
  - Do not pour water into or onto the container
  - Do not immerse the container in a water bath.
- Move container out of the building and leave in an open area downwind of the building, other workers and members of the public.
- Add more silica sand if possible to do so without inhaling smoke; use a charcoal filter or air fed mask.

- If necessary evacuate building until the exothermic reaction has been brought under control.
- Ventilate rooms affected by smoke.
- Call emergency services if anyone is affected by the smoke.

### **Ratio of components**

3.6 parts of Base A are mixed with 1 part of Hardener B, by weight.  
2.75 parts of Base A are mixed with 1 part of Hardener B, by volume.

Add all of Hardener B to Base A. Mix with slow speed drill and helical spinner, taking care not to entrain air. Immediately after mixing completely pour out the mixture and apply using a double-lipped rubber rake and/or roller. Do not leave mixed product in the bucket because it will react quickly and exotherm, leading to dark grey fumes being produced.

### **Application temperature**

The recommended substrate temperature is 15 - 25°C, but no less than 10°C.  
The temperature of the substrate should exceed the "dew point" by 3°C during application and hardening.  
Temperatures should not fall below 5°C in the 24 hrs after application.

### **Application time/pot life**

Ready-mixed product should be used within 20 minutes at a temperature of 20°C.

**NOTE:** The above timing applies from the point at which the material is poured onto the floor.  
At higher temperatures the application time is shorter.

### **Consumption of Materials**

1-5 kg/m<sup>2</sup>

Average consumption is usually 2-3 kg/m<sup>2</sup>

Weaker areas may consume up to 5 kg/m<sup>2</sup>, whilst stronger areas may be able to manage with just 1 kg/m<sup>2</sup>.

Apply a small control area to determine the required consumption.

### **Curing time (at 20°C)**

Can be walked on after 8 hours.

The product is fully hardened after 12 hours.

High humidity in the early stages of cure can result in white, matt surfaces (blooming).

Do not cover or wash within the cure period.

### **Colours**

Clear

### **Solids content**

Approx. 100 %

### **Finish**

Gloss

### **Density**

Component A approx. 1.15 kg/l

Component B approx. 0.87 kg/l

A+B approx. 1.04 kg/l.

## Storage

12 months in unopened pack.  
Storage temperature between 5 and 40°C.  
Protect from weather and moisture/contaminant ingress.

## Packaging

The product is delivered A+B in the following packs:

Unit		Base A	Hardener B
2.5 kg	(2.5 litres)	1.9 kg	0.6 kg
10 kg	(9.6 litres)	7.8 kg	2.2 kg

**CE Mark** – see the Declaration of Performance for details.

*Any suggested practices or installation specifications for the composite floor or wall system (as opposed to individual product performance specifications) included in this communication (or any other) from Flowcrete UK Ltd constitute potential options only and do not constitute nor replace professional advice in such regard. Flowcrete UK Ltd recommends any customer seek independent advice from a qualified consultant prior to reaching any decision on design, installation or otherwise.*