SAFE STEP® 200
Technical Data & Application Instructions

Description

SAFE STEP® 200 is a high performance, two part, epoxy antislip floor coating designed for application in areas of heavy vehicular traffic. This high performance safety coating is easy to apply and offers optimum adhesion and slip resistance to metal, concrete and timber surfaces. Ideal applications include loading bays, vehicular ramps and all areas subject to heavy traffic.

SAFE STEP® 200 can be applied to any clean, dry surface by hard roller, trowel or spray.

SAFE STEP® 200 resists most acids, alkalis, solvents, grease, oils and salt water.

Technical Data (Typical)

Pack Size:	5 litres
Colour:	Tile Red, Grey, and Safety Yellow
Chemical Type:	Solvent based two pack epoxy
Density:	c1.8
Pot Life:	6 hours @ 20°C
Curing Times	
Light Traffic:	24 hours @ 20°C
Heavy Traffic:	48 hours @ 20°C
Full Chemical Resistance:	7 days
Theoretical Coverage Per Pack	
Spray:	6.8 m²
Roller:	5.0 m²
Trowel:	6.2 m²
Shelf Life:	2 years
Flash Point:	25°C
Application Temperature:	10 - 30°C
Storage Conditions:	10 - 30 °C
EU limited valve for this product (Cat A/ j) :550g/l (2007) / 500g/l (2010)	This product contains max 180 g/l VOC.
Volume Solids:	89 - 92%
Slip Resistance - Pendulum Method	
Perpendicular:	Dry: 90 (Excellent) Wet: 74 (Excellent) Oily: 52 (Excellent)

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Surface Preparation

To ensure optimum adhesion of the floor coating it is vital that the correct quality and quantity of preparation is carried out initially.

1. Concrete should be at least 28 days old. Applying a coating onto concrete less than 28 days old could cause failure of the product.

2. All oils, grease, dirt, etc. must be removed using a suitable solvent or aqueous de-greaser solution.

3. All old coatings must be removed. This can be achieved by grit/shot blasting, scabbling or scarifying.

4. If the surface is not sufficiently rough to ensure a suitable key or where the surface of the concrete is weak the concrete must be etched using a suitable acid etch system if grit/shot blasting cannot be used.

5. Porous surfaces such as concrete and wood should be primed using SAFE STEP® Non-Metal Primer to seal the surface. Metal surfaces should be primed using SAFE STEP® Primer.

6. For more detailed surface preparation on concrete or other surfaces contact the ROCOL Site Safety Systems Technical Department.

Application

SAFE STEP® 200 is designed to be applied over a primer.

1. Pre-mix base component with a mechanical mixer such as a pneumatic drill motor with a jiffy mixing blade. Make sure all settlement is lifted off bottom of the container and is uniformly dispersed.

2. Pour entire contents of hardener can into base material and mix with a mechanical mixer (as above) for approximately 3-5 minutes or until mixed material assumes a uniform colour and appearance, scrape bottom and sides. Apply material immediately. No induction time is required.

3. Working pot (usable) life is approximately 6 hours at 20°C. Pot life is increased at lower temperatures and decreased at higher temperatures.

4. SAFE STEP® can be applied at surface temperatures between 10°C and 30°C. Application is not recommended when surface temperature is above 30°C or below 10°C. At below 10°C curing times will increase substantially.

5. SAFE STEP® 200 can be applied by hard roller, trowel or spray equipment.

Application Techniques

For a tidy edge, mask off the area to be coated with masking tape. Remove masking tape whilst SAFE STEP® 200 is still wet by pulling away from the area.

Roller Application

Rolled applications provide the most aggressive non-slip characteristics with an irregular, ridged surface.

1. Use the SAFE STEP® hard, phenolic coated, roller for applying SAFE STEP® 200.

2. Pour a pool of the mixed product onto the prepared substrate.

3. Roll material in one direction only, towards body in slow straight strokes using moderate pressure on the handle. Do not over-roll too many times or press down too heavily.

4. For maximum effect, rolling should be carried out perpendicular to the direction of traffic. Roll across ramps not down.

Trowel Application

1. Trowelled applications provide excellent anti-slip characteristics with a rough textured finish.

2. Use a flexible bladed plasterer's finishing trowel approximately 10 x 30 cm. Wetting trowel with xylene will help improve surface finish.

3. Pour a pool of SAFE STEP® 200 onto the prepared surface.

4. Hold the trowel at 45 degrees angle to the surface. Pull material towards body with a sweeping motion reversing the angle on the opposite stroke.

Spray Application
Sprayed applications will result in a uniform appearance with good anti-slip characteristics and is an ideal method for large areas.

There are two types of spray equipment recommended for spraying SAFE STEP® 200. The choice depends on the size of the area to be coated.

Hopper Gun (for small areas up to 50m^2)
Gun type: Gravity fed hopper gun incorporating a 5mm nozzle, 5-litre hopper and elbow adapter for aiming at the floor.
Air supply: 40-60psi air pressure. Ensure the air is oil free.

Spray the product in a linear motion at a distance of 40cm from the surface with an overlap of approximately 30%.

To clean equipment use xylene immediately after use.

Pressure Pot Sprayer (for large areas over 50m^2)
Machine type: bottom outlet pressure pot nominally 30-50 litre capacity equipped with a double regulator and air driven agitator.
Air supply: typically 50cubic feet per minute.
Fluid pressure: typically 2-3 bar (30-45 psi)
Fluid hose: 25mm diameter bore reinforced pvc pipe
Atomising air pressure: typically 3-4 bar (45-

60 psi)
Tip diameter: 6mm

Fluid inlet to receive 25cm bore diameter pvc pipe. Air inlet to receive a 6mm-diameter airline.

With the spray nozzle removed and atomising air isolated slowly build up the fluid pressure to allow product to flow along the fluid pipe and through the gun into a container. This is done to prime the pipelines and remove any air. Note the pressure reading when the product is just flowing easily (i.e. jet of material reaching 40 - 50cm from gun). Switch off the air supply. Replace the spray nozzle and then rebuild the fluid pressure to the noted reading. Once product is flowing out of the nozzle begin to increase the atomising air pressure at the gun. As this pressure is built up the flow of product will form a spray pattern.

It is essential to match up the atomising air with the product fluid pressure, i.e. if the spray gun is not forming a spray pattern then there is not enough atomising air for the flow-rate. This can be remedied in one of two ways:

1. Reduce fluid pressure.
2. Increase atomising pressure.

Once an even spray pattern is achieved spraying can commence in a linear manner with approximately 30% overlap on each pass.

All components of the machine should be cleaned with xylene solvent.

Surface Maintenance
It is essential that the SAFE STEP® 200 coating is cleaned regularly to maximise anti-slip performance. The use of a water based biodegradable detergent cleaner and a long handled fibre bristled brush or floor cleaning machine is recommended. After cleaning the surface should be rinsed thoroughly with clean water and allowed to dry.

Limitations
Higher temperatures will shorten curing times and conversely, lower temperatures and high relative humidity will lengthen curing times. Exterior applications must be protected from rain for at least 24 hours after application. Protect from heavy rain or extended exposure to water, oil and chemicals for 5 to 7 days.

Health & Safety
Refer to Safety Data Sheet before use. If further copies are required or for further information, please contact us at the address below:

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