



DATASHEET

DIMAP SAFECORE SF

**SOLVENT FREE EPOXY BASED PROTECTIVE COATING
FOR CONCRETE AND STEEL SURFACES.**

BENEFITS

- Solvent free
- Non-toxic
- Food grade & Hygienic
- Low odour, taint free
- Ease of application
- Very good chemical resistance
- Good mechanical properties
- Abrasion resistant
- Excellent adhesion to concrete and steel surfaces
- Compatible with all substrates
- Corrosion resistant

PRODUCT:

SAFECORE SF is a Two part, epoxy based, high-build, solvent free, protective coating for concrete and steel surfaces. It conforms to **IS 9197:1979 & ASTM D543**.

DATASHEET

USES

SAFECORE SF is used as a hard wearing, hygienic, chemical resistant and taint free coating, suitable for contact with foodstuffs and potable water after cure. It is also applicable on floors, walls and ceilings. It is also used with glass fibre reinforced sheet with crack bridging properties for bund areas and storage tanks.

SAFECORE SF provides a tough, hygienic, chemical resistant coating for walls, floors and ducts in dairies, abattoirs, food processing areas etc. It is particularly suitable for lining concrete of water reservoirs since it is taint-free.

DESCRIPTION

SAFECORE SF is a solvent-free, Epoxy resin based system, formulated to allow ease of application to both floors and walls. The cured film is extremely tough, and has a smooth, hard, semi glossy finish with good slip resistance properties. **SAFECORE SF** has an excellent adhesion to concrete and metal surfaces. It can be used to line drinking water reservoirs and in food processing areas, since after curing, it is taint-free.

APPLICATION

Surface Preparation : Surface should be sound and levelled, Blow-holes and surface defects can be made good with **DIMAPSCREED VF** Epoxy Putty to facilitate the application of uniform continuous coatings.

Mixing : **SAFECORE SF** is supplied as two components, ready to use in pre weighted packs of Base and Hardener. Take Base in a container and mix it then add Hardener into Base and mix it thoroughly using mechanical mixer. Mix up to 3 minutes and mixing speed of the mixer should be between 300 to 400 rpm.

Application : **SAFECORE SF** should be applied by , roller to give a continuous



DATASHEET

film on the prepared surface.

Cleaning : Equipment should be cleaned with **SAFECORE TOOL CLEAN** immediately after use.

PACKING & COVERAGE

SAFECORE SF is supplied in 5 kg pack.

Over typical dimap faced concrete 5 kg pack of **SAFECORE SF** will cover approximately 15 m² for 200 micron DFT.

PROPERTIES:

Colour : Available in RAL 7003 (Moss grey) and RAL 7043 (Traffic grey B).

*Colour variation is available on request for big quantity

Pot Life : 45-50 mins. at 30°C

Overcoating Time : ~ 24 hrs **Compressive strength** : ~70

Mpa **Flexural Strength** : ~40 Mpa

Tensile strength : ~20 Mpa

(ASTM D638-99)

Water Absorption

(ASTM C 413:1996) : ~0.06%

Shore D Hardness

(ASTM D2240:1996) : ~85

Abrasion Resistance

(ASTM D4060-CS-17)

wheel : < 50 mg weight loss in 1000 cycles

Bond Strength : >1.5 N/mm²

Temperature Range : During Application : 5°C to 40°C,

In Service : 10°C to 60°C

Curing Time :

Temperature	Foot Traffic	Full Cure
10°C	~24 hours	~15 days
20°C	~18 hours	~9 days
30°C	~12 hours	~7 days

Chemical Resistance

(As per ASTM D 543:1996) : Resistant

CHEMICAL RESISTANCE CHART

	Temp	24 hrs.	3 days	7 days	30 days	90 days	6 months
Water	30°C	R	R	R	R	R	R
Acetone	30°C	R	R	R	R	R	R
Ethanol 95%	30°C	R	R	R	R	R	R
Formic acid 10%	30°C	R	R	R	R	R	R
Acetic acid 20%	30°C	R	R	R	S	S	S
Sodium hydroxide 50%	30°C	R	R	R	R	R	R
Nitric acid 20%	30°C	S	S	F	F	F	F
Hydrochloric acid 37%	30°C	S	S	S	S	S	S
Sulphuric acid 50%	30°C	R	R	S	S	S	S

R= resistant

F=not resistant

S= resistant but with discolouration and/or loss of gloss

SHELF LIFE & STORAGE

SAFECORE SF will have a shelf life of **36 months** in unopened containers when kept in dry conditions at a temperature between 5°C to 35°C. Material must be kept under shaded area and away from direct sunlight. Storage at higher temperature or high humidity may reduce shelf life.

HEALTH & SAFETY



DATASHEET

Cleanliness in handling Epoxy resins is essential to prevent skin irritation. Please refer to the **SAFECORE** Resin Safety HANDLING GUIDE for detailed recommendations.

TECHNICAL SERVICES

While new advances and changes will take place but one thing will never change is quality and meeting special needs of our customers. Our laboratory in Baroda and technical personnel & experts are available to provide additional information and technical assistance. We are eager to work with you in development of new product and resolve your problem.