

TECHNICAL DATA SHEET

NATIONAL GUARD EPOXY FLOORING TOPCOAT S.F.

PRODUCT DESCRIPTION	A two pack, chemical resistant, high build solvent free topcoat based on polyamine cured epoxy resin for concrete floors. The fully cured film has good adhesion, excellent chemical resistance, and good abrasion and impact resistances. It provides good resistance to acids and alkali solutions. It is self leveling coating for heavy duty applications.
RECOMMENDED USES	For heavy duty applications for protection of cementitious surfaces. Since it has excellent resistance to chemical and mechanical damages, useful for the flooring applications of workshop, kitchen, breweries, beverage plants and stores, cold storage, garages, malls etc.

TECHNICAL DATA

COLOUR, DRY FILM	Limited Colours	Clear
FINISH, DRY FILM	Smooth, Glossy	Smooth, Glossy
VOLUME SOLIDS	100%	100%
(ASTM D2697)		
SPECIFIC GRAVITY	1.65 ± 0.05 (mixed) pastel colour	1.09 ± 0.05
THEORETICAL SPREADING	$2 \text{ M}^2/\text{LTR}$	$3 \text{ M}^2/\text{LTR}$
RECOMMENDED DFT (DRY	300 Microns/Coat	300 Microns/Coat
FILM)		
RECOMMENDED WFT (WET	300 Microns/Coat	300 Microns/Coat
FILM)		
FLASH POINT	>100°C	>100°C

DRYING TIME

Drying time @ 30 ℃ (Temperature, humidity, air movement, film thickness and number of coats all affect the drying time.)	
TOUCH DRY	3 – 4 hours
*DRY TO RECOAT	12 – 16 hours (minimum) – 72 hours (maximum)
FULLY CURED	7 days

^{*} With same generic type paint.

ADVANTAGES

NATIONAL GUARD EPOXY FLOORING TOPCOAT S.F.	Self – leveling, high build with excellent water resistance and chemical resistance. The fully cured film has good abrasion and
SYSTEM	impact resistances, good adhesion, good resistance to acids and alkali solutions, good abrasion and impact resistance.

Rev. 07/18 Page 1/4 ISO 9001 & 14001 OHSAS 18001 CERTIFIED FACTORY



TECHNICAL DATA SHEET

APPLICATION INSTRUCTION

SURFACE PREPARATION	New Construction: Concrete floors, to be coated should be allowed to cure for at least 28 days. Floor should be sound, clean and free from oils, grease, mortar, loose particles, dust etc. Laitance should be removed by the use of mechanical means such as vacuum recovery shot blasting. Moisture content should be less than 5%.
	Existing Substrate: All contamination must be removed and a sound clean substrate should be exposed. Mechanical means of preparation are preferred followed by the removal of dust and other loose debris using an industrial vacuum. All cracks and minor damage-surface should be repaired and allow to dry prior to priming.

APPLICATION DATA

APPLICATION METHOD	Airless Spray, Trowel, Roller or Brush (touch-up)
CLEANING/THINNING	National Epoxy Thinner
THINNER (VOLUME)	Ready to use
CONV. SPRAY REQUIREMENTS	Not Applicable
AIRLESS SPRAY REQUIREMENTS	Pressure: 3000 psi
NOZZLE SIZE	0.025" - 0.030"
MIXING RATIO (BY WEIGHT)	Base : Hardener Colour 5 : 1 and for Clear 2 : 1
POT LIFE @ 30°c (100 ml)	15 – 20 minutes

SYSTEM

RECOMMENDED SYSTEM	National Guard Primer for Cement Clear :	1 coat
To be applied on prepared surface. Application temperature and surface temperature between 8°C - 35°C moisture less than 4% mix, required material at a time and apply.	OR	
	National Guard Epoxy Flooring Primer S.F. :	1 coat
	National Guard Epoxy Flooring Topcoat S.F. :	1-2 coats
	For antis kidding, spread recommended size aggrega	ates, when
	first coat is wet. Apply second coat as a topcoat after	r 8 hours.

Rev. 07/18 Page 2/4



TECHNICAL DATA SHEET

NATIONAL/INTERNATIONAL TEST CERTIFICATES

Sr.	Test Description	Test Reference	Compliance
No.			
1	Shore "A" Hardness	ASTM D 2240 - 05	
2	Tensile Strength	ASTM D 638 : 02a	
		ASTM C 307 : 94	
3	Elongation	ASTM D 638 : 02a	
4	Flexural Strength	ASTM C 580 : 1998	
		BS 6319 Part 3: 1983	
5	Pull off Strength Bond Strength /	ASTM D 4541 : 2002	
	Adhesion Strength	BS 1881 Part 207	
6	Compressive Strength	ASTM C 579 - 96	
7	Impact Resistant	ISO 6272	
8	Abrasion Resistant	ASTM D 4060 – 07	
9	Rapid Chloride Permeability	ASTM C 1202 : 97	
10	Alkali Resistance	ASTM D 543 : 1995	
11	Chemical Resistance	ASTM D 1308 : 87	
12	Reduction in Water Absorption	ASTM D 870	
13	Crack Bridging Ability	ASTM C 836 : 95	
14	Surface Spread of Flame	BS 476 : Part 7 : 1997	
15	Reaction to Fire	ASTM E 84 – 16	
16	Salt Spray	ASTM B 117	
17	VOC	USEPA 24	Local Regulatory Requirements

ADDITIONAL DATA

SHELF LIFE @ 30°C	18 months, in original sealed container, with proper storage
	conditions.

HEALTH & SAFETY

SAFETY PRECAUTIONS	As a general rule, avoid skin and eye contact by wearing overalls, gloves, goggles, and mask etc. Spillage on skin should immediately be removed by thorough washing with water and soap or suitable cleaner. Eye should be flushed with fresh water. Avoid inhalation of vapours and paint mist by wearing suitable mask. In the event of ingestion and eye contact, seek medical attention immediately. Painting must be carried out in well-ventilated area.
	Smoking in the area should not be permitted. Local safety regulations should be followed.

Rev. 07/18 Page 3/4



TECHNICAL DATA SHEET

STORAGE & HANDLING

STORAGE	Store the paint in proper storage conditions as per the local
	regulations. Keep the paint container in sealed condition under
	shed, away from direct sunlight and extreme temperatures. Do
	not stock paint material near to any ignition sources. Do not put
	back the half or unused material back in original container,
	containing the supplied paint, to avoid contamination. Handle
	with care. Stir well before use.

NOTE: We warranty only the quality of our product and this data sheet is based on results obtained from experience and tests. We reserve the right to change data without prior notice. For surface preparation, safety details refer specifier and safety data

This data sheet supersedes all previous issued.

Issued: 0718