

**TECHNICAL DATA SHEET** 

## NATIONAL GUARD EPOXY FLOORING TOPCOAT

| PRODUCT<br>DESCRIPTION | A two pack chemical resistant topcoat based on polyamide cured epoxy resin for concrete floors. The fully cured film has good adhesion to concrete floors and good resistance to water. It has good flow and resistant to splash and spillage of mild chemicals and solvents. It has good abrasion and impact resistance and easy to clean. |
|------------------------|---|
| RECOMMENDED<br>USES    | General purpose flooring topcoat for cementitious surfaces. It can be applied by spray, roller and brush. It can be used with recommended size aggregates also for light duty flooring applications.  |

## **TECHNICAL DATA**

| COLOUR, DRY FILM      | Limited pastel shade colours.     |                                 |
|-----------------------|-----------------------------------|---------------------------------|
| FINISH, DRY FILM      | Smooth / Glossy, (Matt on         | Clear / Glossy                  |
|                       | request)                          |                                 |
| VOLUME SOLIDS         | 55 ± 2%                           | 40 ± 2%                         |
| (ASTM D2697)          |                                   |                                 |
| SPECIFIC GRAVITY      | 1.40 ± 0.05 (mixed) colour        | $1.00 \pm 0.05$ (of mixed)      |
| THEORETICAL SPREADING | $11 - 5.5 \text{ M}^2/\text{LTR}$ | $10 - 8 \text{ M}^2/\text{LTR}$ |
| RECOMMENDED DFT (DRY  | 50 – 100 Microns/Coat             | 40 – 50 Microns/Coat            |
| FILM)                 |                                   |                                 |
| RECOMMENDED WFT (WET  | 90 – 180 Microns/Coat             | 100 – 125 Microns/Coat          |
| FILM)                 |                                   |                                 |
| FLASH POINT           | 25°C                              | 25°C                            |

### **DRYING TIME**

| Drying time @ 30 ℃ (Temperature, humidity, air movement, film thickness and number of coats |   |
|---|---|
| all affect the drying time.)  |   |
| TOUCH DRY   | 3 – 6 hours                             |
| *DRY TO RECOAT / OVERCOAT   | 12 hours (minimum) – 72 hours (maximum) |
| FULLY CURED   | 7 days                                  |

<sup>\*</sup> With same generic type paint.

#### **ADVANTAGES**

| NATIONAL GUARD EPOXY | Good adhesion, good resistant to water and mild chemicals, |
|----------------------|--|
| FLOORING TOPCOAT     | good flow abrasion and impact resistance, easy to clean.   |

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## **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         | Roller, Brush or Spray                                    |
|----------------------------|---|
| CLEANING/THINNING          | National Epoxy Thinner                                    |
| THINNER (VOLUME)           | 5 – 10% depending on method of application                |
| CONV. SPRAY REQUIREMENTS   | Possible  |
| AIRLESS SPRAY REQUIREMENTS | Pressure: 2000-2200 psi                                   |
| NOZZLE SIZE                | 0.018" - 0.020"   |
| MIXING RATIO (BY VOLUME)   | Base : Hardener   |
|                            | 4:1 (Mix thoroughly keep for 15 – 20 minutes before use.) |
| POT LIFE @ 30°c (100 ml)   | 6 – 8 hours   |

#### **SYSTEM**

| RECOMMENDED SYSTEM                 | National Guard Primer for Cement Clear : 1 coat   |
|------------------------------------|---|
| To be applied on prepared surface. | National Guard Epoxy Flooring Topcoat : 2 coats   |
|                                    | For antis kidding, spread recommended size aggregates, when first coat is wet. Apply second coat as a topcoat after 24 hours. |

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### NATIONAL/INTERNATIONAL TEST CERTIFICATES

| Sr. | Test Description              | Test Reference                | Compliance                    |
|-----|-------------------------------|-------------------------------|-------------------------------|
| No. | C1                            | 4 CEN 4 D 2240 05             |                               |
| 1   | Shore "A" Hardness            | ASTM D 2240 – 05              |                               |
| 2   | Shore "D" Hardness            | ASTM D 2240 – 05              |                               |
| 3   | Tensile Strength              | ASTM D 638 : 02a              |                               |
| 4   | Elongation                    | ASTM D 638 : 02a              |                               |
| 5   | Flexural Strength             | ASTM C 580                    |                               |
| 6   | Bond Strength                 | BS 1881 Part 207              |                               |
| 7   | Compressive Strength          | ASTM C 579 – 01               |                               |
| 8   | Impact Resistant              | ISO 6272                      |                               |
| 9   | Abrasion Resistance           | ASTM D 4060 – 07              |                               |
| 10  | Rapid Chloride Permeability   | ASTM C 1202 : 97              |                               |
| 11  | Alkali Resistance             | ASTM D 543 : 1995             |                               |
| 12  | Chemical Resistance           | ASTM D 1308 : 87              |                               |
| 13  | Reduction in Water Absorption | ASTM C 642 : 97               |                               |
| 14  | VOC                           | USEPA – 8260<br>ISO 11890 – 2 | Local Regulatory Requirements |

### **ADDITIONAL DATA**

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

#### **HEALTH & SAFETY**

| SAFETY      | As a general rule, avoid skin and eye contact by wearing          |
|-------------|---|
| PRECAUTIONS | 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.  |
|             | This product contains flammable materials and should be kept      |
|             | away from the sparks and open flames, smoking in the area         |
|             | should not be permitted. Local safety regulations to be           |
|             | followed.   |

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### **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