

# NATIONAL POLYURETHANE TOPCOAT PROTECTIVE COATINGS

**TECHNICAL DATA SHEET** 

### NATIONAL POLYURETHANE TOPCOAT

| PRODUCT     | Two packs, colour retentive glossy polyurethane topcoat, with  |
|-------------|--|
| DESCRIPTION | excellent water resistance, salt and corrosion resistance. The |
|             | dry film is having excellent adhesion to various surfaces,     |
|             | flexibility and impact resistances. The product is recommended |
|             | for interior and exterior applications, even in marine         |
|             | conditions, with excellent UV resistance.                      |

| RECOMMENDED | Topcoat for textured coating system                    |
|-------------|--|
| USES        | Topcoat for Epoxy system                               |
|             | Topcoat on steel, wood and masonry                     |
|             | Recommended as topcoat for extreme climatic conditions |

### TECHNICAL DATA

| COLOUR, DRY FILM          | As per National shade card          |
|---------------------------|-------------------------------------|
| FINISH, DRY FILM          | Smooth, Glossy / Semi glossy / Matt |
| VOLUME SOLIDS             | $47 \pm 2\%$                        |
| (ASTM D2697)              |                                     |
| SPECIFIC GRAVITY          | $1.20 \pm 0.05$ (of mix)            |
| THEORETICAL SPREADING     | 11.7 M <sup>2</sup> /LTR            |
| RECOMMENDED DFT (DRY FILM | 40 Microns/Coat                     |
| THICKNESS)                |                                     |
| RECOMMENDED WFT (WET      | 85 Microns/Coat                     |
| FILM THICKNESS)           |                                     |
| FLASH POINT               | 25°C                                |
| FLEXIBILITY               | Excellent                           |
| WATER RESISTANCE          | Excellent                           |
| IMPACT RESISTANCE         | Excellent                           |
| UV RESISTANCE             | Excellent                           |

#### **DRYING TIME**

| Drying time @ 30°C (Temperature, humidity, air movement, film thickness and number of coats |             |
|---|-------------|
| all affect the drying time.)  |             |
| TOUCH DRY   | 2 – 3 hours |
| *DRY TO RECOAT / OVERCOAT   | 12 hours    |
| FULLY CURED   | 48 hours    |

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





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### **ADVANTAGES**

| NATIONAL POLYURETHANE | Two pack system with long pot life, easy to apply, good        |
|-----------------------|--|
| TOPCOAT               | coverage, excellent adhesion to various surfaces, excellent    |
|                       | flexibility, impact resistance, and U.V. resistance, excellent |
|                       | anticorrosive property and salt resistance.                    |

### **APPLICATION INSTRUCTION**

| SURFACE     | For steel surfaces: Oil and grease should be removed by           |
|-------------|---|
| PREPARATION | solvent cleaning. Abrasive blasting to min. Sa 2.5 is required    |
|             | for better anchoring. Corroded areas should be power tool         |
|             | cleaned to St3 or blast cleaned to Sa 2.5. Existing system        |
|             | should be dry and free from loose paint, salt, grease and other   |
|             | contaminants prior to over coating.                               |
|             | For concrete surfaces: New concrete should be allowed to cure     |
|             | for at least 28 days. Old surface should be free from oil, grease |
|             | and salt etc. Surface should be dry, clean and sound before       |
|             | painting.   |

#### **APPLICATION DATA**

| APPLICATION METHOD       | Brush, Roller or Spray                                      |
|--------------------------|---|
| CLEANING/THINNING        | National Polyurethane Thinner (thinner should only be added |
|                          | after mixing the components)`                               |
| THINNER (VOLUME)         | 5-15% depending on method of applications                   |
| CONV. SPRAY REQUIREMENTS | Pressure: 50 psi  |
| AIRLESS SPRAY            | Pressure : 2100 psi   |
| REQUIREMENTS             |   |
| NOZZLE SIZE              | 0.018" – 0.020" for airless spray                           |
| MIXING RATIO (BY VOLUME) | Base : Hardener   |
|                          | 4:1 (Mix properly, keep 10-15 minutes before use)           |
| POT LIFE @ 30°c (100 ml) | 8 hours (Reduced at higher temperatures)                    |
|                          | (Note: Material may gel at elevated temperatures)           |

#### **SYSTEM**

| RECOMMENDED SYSTEM To be applied on prepared surface. | No. of coats x D                           | OFT (micron) |
|---|--|--------------|
|   | For steel and metal surfaces:              |              |
|   | National Guard Zinc Phosphate Epoxy Primer | : 1 x 50     |
|   | (OR)                                       |              |
|   | National Guard Epoxy Red Oxide Primer      | : 1 x 50     |
|   | National Polyurethane Topcoat              | : 2 x 40     |







# NATIONAL POLYURETHANE TOPCOAT PROTECTIVE COATINGS

#### **TECHNICAL DATA SHEET**

#### **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 airmask 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 airmask. In the event of ingestion and eye    |
|             | contact, seek medical attention immediately. Painting must be  |
|             | carried out in well-ventilated area.                           |
|             | This as industrial 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  |
|             | should be followed.  |

#### **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: 0608

