

NATIONAL GUARD TOPCOAT M.I.O PROTECTIVE COATINGS

**TECHNICAL DATA SHEET** 

# NATIONAL GUARD TOPCOAT M.I.O.

| PRODUCT<br>DESCRIPTION | A two pack polyamide cured epoxy based topcoat pigmented<br>with micaceous iron oxide. It is resistant to water, chemicals<br>and mineral oils. A fully cured coating has high resistance to<br>abrasion and impact along with excellent barrier action. |
|------------------------|--|
| RECOMMENDED<br>USES    | As a finishing coat for structural steel, exterior of storage<br>tanks, bridges and towers. The coating is highly<br>recommended for chemical plants, industrial area for its high<br>abrasion and chemical resistance.                                  |

# TECHNICAL DATA

| COLOUR, DRY FILM      | Grey                                |
|-----------------------|-------------------------------------|
| FINISH, DRY FILM      | Semi-gloss                          |
| VOLUME SOLIDS         | $56 \pm 2\%$                        |
| (ASTM D2697)          |                                     |
| SPECIFIC GRAVITY      | $1.55 \pm 0.05 \text{ (mix)}$       |
| THEORETICAL SPREADING | $11.2 - 5.6 \text{ M}^2/\text{LTR}$ |
| RANGE                 |                                     |
| RECOMMENDED DFT RANGE | 50 – 100 Microns/Coat               |
| (DRY FILM THICKNESS)  |                                     |
| RECOMMENDED WFT RANGE | 90 – 180 Microns/Coat               |
| (WET FILM THICKNESS)  |                                     |
| FLASH POINT           | 25°C                                |
| FLEXIBILITY           | Good                                |
| CHEMICAL RESISTANCE   | Good                                |
| WATER RESISTANCE      | Very good                           |
| ABRASION RESISTANCE   | High                                |

# **DRYING TIME**

| Drying time @ 30°C (Temperature, humidity, air movement, film thickness and number of coats all affect the drying time.) |  |
|--|--|
| <b>TOUCH DRY</b> 4 hours   |  |
| *DRY TO RECOAT / OVERCOAT  | 24 hours (minimum) – For maximum over coating interval |
|  | please refer to Technical Service Division.            |
| HARD DRY   | 7 days   |

\*For same generic type paint.





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## **ADVANTAGES**

| NATIONAL GUARD TOPCOAT | The dry film is resistant to water, chemicals and mineral oils. It |
|------------------------|--|
| M.I.O.                 | has high resistance to abrasion and impact along with excellent    |
|                        | barrier action.  |

### **APPLICATION INSTRUCTION**

| SURFACE PREPARATION | It can be applied directly over intermediate coat/undercoat or |
|---------------------|--|
|                     | primed substrate. Galvanized steel, aluminium and other light  |
|                     | metal alloys should be etched or wash primed before primer     |
|                     | and undercoat application.                                     |

## **APPLICATION DATA**

| APPLICATION METHOD       | Airless Spray  | Conventional Spray       | Brush |
|--------------------------|--|--------------------------|-------|
| CLEANING/THINNING        | National Epoxy Thinner (thinner should be added after mixing |                          |       |
|                          | the component)   |                          |       |
| THINNER (VOLUME)         | 5 - 10%  | 10 - 15%                 | 10%   |
| CONV. SPRAY REQUIREMENTS | Atomizing Pressure : 40 psi                                  |                          |       |
| AIRLESS SPRAY            | 2200 psi   |                          |       |
| REQUIREMENTS             |  |                          |       |
| NOZZLE SIZE              | 0.019"   |                          |       |
| MIXING RATIO (BY VOLUME) | Base : Hardener  |                          |       |
|                          | 4 : 1 (Mix thoroughly, keep for $10 - 15$ minutes)           |                          |       |
| POT LIFE @ 30°c (100 ml) | 8 hours (reduced at higher temperature)                      |                          |       |
|                          | Note: Material may ge  | el at elevated temperatu | re.   |

## **SYSTEM**

| <b>RECOMMENDED SYSTEM</b><br>To be applied on prepared surface. | No. of Coats x                        | DFT (Microns) |
|---|---------------------------------------|---------------|
|   | National Guard Epoxy Red Oxide Primer | : 1 x 50      |
|   | National Guard M.I.O. H.B.            | : 1 x 125     |
|   | National Guard Topcoat M.I.O.         | : 1 x 75      |

# **ADDITIONAL DATA**

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

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## **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.  |
| 1           |  |
|             |  |

#### **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.

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This data sheet supersedes all previous issued. Issued: 0608

