



**NATIONAL CAVALIER (THERMAL INSULATING PAINT)**  
**DECORATIVE COATINGS**

**TECHNICAL DATA SHEET**

## NATIONAL CAVALIER (THERMAL INSULATING PAINT)

|                            |  |
|----------------------------|--|
| <b>PRODUCT DESCRIPTION</b> | National Cavalier is a multi-functional thermal insulating paint, based on elastomeric, flexible and high quality 100% pure acrylic emulsion, contains hollow micro ceramic spheres, which encapsulates the surface from heat transfer, as well as thermal shock of the coating for a long period of time. It has very good weather and UV resistances with excellent adhesion. It can be used as a lightweight thermal insulative decorative coating for interior and exterior surfaces. It contains anti fungal and anti bacterial additives.                |
| <b>RECOMMENDED USES</b>    | In the modern construction technology, National Cavalier is highly recommended for, lightweight multifunctional thermal insulations, waterproofing roof systems, duct coating etc. It can also be applied on interior or exterior surfaces like concrete, brickwork, plaster, and masonry for decorative purpose. For metal roof surfaces, and duct coating use suitable primer, before Cavalier application. It can be used for sealing the hairline cracks also. It can be overcoated with National Acrylic Rock, Nationalthane etc. for variety of colours. |

### TECHNICAL DATA

|                                   |                                 |
|-----------------------------------|---------------------------------|
| <b>COLOUR, DRY FILM</b>           | White & Light colours           |
| <b>FINISH, DRY FILM</b>           | Matt                            |
| <b>VOLUME SOLIDS (ASTM D2697)</b> | 45 ± 2%                         |
| <b>SPECIFIC GRAVITY</b>           | 1.07 ± 0.05                     |
| <b>THEORETICAL SPREADING</b>      | 1.10 – 0.75 M <sup>2</sup> /LTR |
| <b>RECOMMENDED DFT (DRY FILM)</b> | 400 – 600 Microns/Coat          |
| <b>RECOMMENDED WFT (WET FILM)</b> | 890 – 1335 Microns/Coat         |
| <b>FLASH POINT</b>                | Water Base                      |

### 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 – 5 hours   |
| <b>DRY TO RECOAT</b>   | 12 – 16 hours |
| <b>DRY TO OVER COAT</b>  | 24 hours      |



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**ADVANTAGES**

|  |   |
|--|---|
| <b>NATIONAL CAVALIER<br/>(THERMAL INSULATING PAINT<br/>SYSTEM)</b> | Light weight insulating paint which reduces the heat transfer and save energy or electrical consumptions of air conditioning equipment, seals hairline cracks, decorative look, water proofing property. Very good UV resistant and excellent adhesion, and absorbs the possible thermal shocks of expansion and contraction of surfaces. |
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**APPLICATION INSTRUCTION**

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|----------------------------|---|
| <b>SURFACE PREPARATION</b> | Before application, the surface should be sound, clean and free from oil, grease, loose particles, dust, etc. Application can be done by the recommended application methods. |
|----------------------------|---|

**APPLICATION DATA**

|                                 |                                       |
|---------------------------------|---------------------------------------|
| <b>APPLICATION METHOD</b>       | Roller, bursh, spray, trowel          |
| <b>CLEANING/THINNING</b>        | Water                                 |
| <b>THINNER (VOLUME)</b>         | Water up to 5% depends on application |
| <b>CONV. SPRAY REQUIREMENTS</b> | Possible                              |
| <b>MIXING RATIO (BY VOLUME)</b> | NA                                    |
| <b>POT LIFE @ 30°c (100 ml)</b> | NA                                    |

**SYSTEM**

|  |  |
|--|--|
| <b>RECOMMENDED SYSTEM</b><br>To be applied on prepared surface.<br>For variety of colours, recommending over coat. | National Acrylic Primer (W.B.) : 1 coat  |
|  | National Cavalier Thermal Insulating Paint : 2 coats   |
|  | (OR)   |
|  | Recommended system.<br>For galvanized or aluminium surfaces use National Wash Primer before application. |



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**NATIONAL/INTERNATIONAL TEST CERTIFICATES**

| <b>Sr. No.</b> | <b>Test Description</b>         | <b>Test Reference</b>   | <b>Compliance</b>             |
|----------------|---------------------------------|-------------------------|-------------------------------|
| 1              | VOC                             | ISO 11890-2<br>USEPA 24 | Local Regulatory Requirements |
| 2              | Thermal Transmission Properties | ASTM C 518:2002         |                               |
| 3              | Practical Washability           | ASTM D 4828:1991        |                               |
| 4              | Tensile Strength                | ASTM D 638:03           |                               |
| 5              | Elongation                      | ASTM D 638:02a          |                               |
| 6              | Crack Bridgeability             | ASTM C 836:95           |                               |
| 7              | Rapid Chloride Permeability     | ASTM C 1202:97          |                               |
| 8              | U.V. Resistance                 | ASTM G 53:88            |                               |
| 9              | Water Absorption                | ASTM D 870:97           |                               |

**ADDITIONAL DATA**

|                          |  |
|--------------------------|--|
| <b>SHELF LIFE @ 30°C</b> | 18 months, in original sealed container, with proper storage conditions. |
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**HEALTH & SAFETY**

|                           |  |
|---------------------------|--|
| <b>SAFETY PRECAUTIONS</b> | Generally, most of the water base paints are quite safe to handle with due 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. Local safety regulations to be followed. |
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**STORAGE & HANDLING**

|                |   |
|----------------|---|
| <b>STORAGE</b> | 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 keep 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.  
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