# TRANSCOAT 370 BW / 370 GW

## Temperature Indicating Paint Blue / Green

**Recommended Use**

Transcoat 370 BW and Transcoat 370 GW are designed to indicate potentially dangerous "hot spots" on the exterior of reactors and pressure vessels resulting from the breakdown of internal insulation. A perceptible colour change marks the area where overheating has occurred. Colour retention is excellent to the threshold temperature. Above the threshold temperature an irreversible progressive discoloration occurs at a rate determined by time and temperature.

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**Characteristics**

- Indicates potential dangerous hot spots.
- Colour changes:
  370 BW : above 200$^0$C/392$^0$F from Blue to White
  370 GW : above 260$^0$C/500$^0$F from Green to White
- Good weathering resistance.
- Colour change is irreversible.

**Transcoat 370 BW :**

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|---|---|
| • up to 175$^0$C/347$^0$F | maintains blue colour |
| • at 200-230$^0$C (392-446$^0$F) | perceptible change to light blue green in 36 to 60 hours |
| • at 260$^0$C/500$^0$F | changing to white in 24 hours |

**Transcoat 370 GW :**

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|---|---|
| • up to 260$^0$C/500$^0$F | maintains green colour |
| • at 280$^0$C/536$^0$F | fading observed after three weeks |
| • at 315$^0$C/599$^0$F | perceptible change after 18 hours |
| • at 400$^0$C/752$^0$F | colour change to white after 3 hours |

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**Physical Data**

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| **Colour** | 370 BW : Blue<br>370 GW : Green |
| **Gloss level** | Flat |
| **Volume Solid** | Approximately 36% |
| **Dry Film Thickness** | 25 - 40 microns |
| **Number of Coat** | 1 |
| **Theoretical Coverage** | at 25 microns<br>370 BW : 18.8 m$^2$/ltr<br>370 GW : 17.6 m$^2$/ltr<br>Allow for application losses, surface irregularities, etc. |
| **Temperature Resistance** | 370 BW : 175$^0$C / 347$^0$F<br>370 GW : 260$^0$C / 500$^0$F<br>(dry heat; max. without changing of colour) |
| **VOC** | 370 BW : 458 g/ltr<br>370 GW : 486 g/ltr |
| **Flash Point (Closed Cup)** | 370 BW : 40$^0$C/104$^0$F<br>370 GW : 40$^0$C/104$^0$F |
| **Component** | 1 |
| **Curing Mechanism** | Evaporation of Solvents |

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|---|---|
| **Pack Size** | 5 Ltrs |
| **Shelf Life** | 1 year |

**Application**

**Recommended System**

Transcoat 370 BW & 370 GW are self-priming and may be applied directly to bare steel. For best steel protection priming with Transcoat 95 FT is recommended.

**Repair**

Spot blast areas to Sa 2½, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch up.

**Surface Preparation**

Coating performance is in general is proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method.
DIRECT APPLICATION ON STEEL - Blast steel surfaces to a minimum of Sa 2½ (ISO 8501-1) or Steel Structures Painting Council SP-10. Note: Blast to achieve a surface profile not to exceed 75 microns as determined with Testex Tape or similar instrument. Remove abrasive residues and dust from surface.
APPLICATION ON PRIMED STEEL – (primed with Transcoat 95 FT) Refer to specifications of the specific primer being used. Prior to coating, primed surface must be clean, dry, undamaged and free of all contaminants including salt deposits. Round of all rough welds and remove weld spatter.
IMPORTANT – Apply Transcoat 370 BW / 370 GW as soon as possible after surface preparation to prevent any contamination. Do not leave blasted steel uncoated overnight. In case of contamination, remove contaminants. Spot blast steel if needed.

**Application Equipments**

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics.
AIRLESS SPRAY – Standard airless spray equipment, such as Graco, De Vilbiss, Nordson-Bede, Spee-Flo or others having a 0.013 to 0.021 inch (0.33mm) fluid tip or larger.
CONVENTIONAL SPRAY – Industrial equipments such as De Vilbiss MBC or JGA gun with 78 or 765 air cap and “E” fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 63x63 PB nozzle setup. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.
MIXER – Use power mixer powered by an air motor or an explosion proof electric motor.

**Application Data Summary**

Like all high performance coating, Transcoat 370 BW and 370 GW must be applied as recommended to obtain the maximum protection for which these coatings are formulated.

# TRANSCOAT 370 BW / 370 GW

## Temperature Indicating Paint Blue / Green

To obtain the maximum performance for which Transcoat 370 BW and 370 GW are formulated, strict adherence to all application instruction, precautions, conditions and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your Transcoat representative.

**Application Data**

| | | |
|---|---|---|
| Substrate | Suitably primed steel / abrasive blasted steel | |
| Application Methods | Conventional or airless spray, brush or roller (brush or roller application may require additional coats) | |
| Environmental Conditions (during application) | | |
| Air Temperature | 5 to 50$^0$C | 41 to 122$^0$F |
| Surface Temperature | 5 to 60$^0$C | 41 to 140$^0$F |
| Thinner | Thinner Trans 650 | |

To prevent moisture condensation during application, surface temperature must be at least 3$^0$C/5$^0$F above the dew point. Never apply coatings under reverse environmental conditions. Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

Drying Times
(ASTM D1640; at 25 microns)

| | | | |
|---|---|---|---|
| Transcoat 370 BW | | | |
| $^0$C/$^0$F | 30/86 | 20/68 | 10/50 |
| Dry trough | 20 | 30 | 60 (minutes) |
| Dry to recoat or topcoat | | | |
| Minimum | 8 | 16 | 48 (hours) |
| Maximum | Not restricted | | |
| Transcoat 370 GW | | | |
| $^0$C/$^0$F | 30/86 | 20/68 | 10/50 |
| Dry trough | 3 | 4 | 16 (hours) |
| Dry to recoat or topcoat | | | |
| Minimum | 16 | 24 | 48 (hours) |
| Maximum | Not restricted | | |

NOTE : Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperature and longer at lower temperatures. Prior to recoating ensure surface is clean. Maximum recoat time depends on coating system to be used. Consult your Transcoat representative for specifics recommendations.

**Application Procedure**

1. Flush equipment with Thinner before use.
2. Thin only if necessary for workability, add up to 10% by volume.

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3. Apply a wet coat even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. When applying directly over inorganic zincs at full thickness, bubbling may occur. A test patch is recommended and if bubbling occurs, apply a "mist coat". Consult your Transcoat representative for further information.
4. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
5. Application at 70 to 100 microns wet film thickness will normally provide 25-40 microns dry film.
6. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
7. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.
   - For conventional spray, use adequate air pressure and volume to ensure proper atomization.
   - Normal recommended dry film thickness is 25 to 40 microns.
8. Clean all equipment with Thinner immediately after use or at least after each working day or shift.

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**Caution**

This product is flammable. Keep away form heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health :

1. circulate adequate fresh air continuously during application and drying
2. use fresh air masks and explosion proof equipment
3. prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact and safety measures see Safety Data Sheet.

**Safety**

Since improper use and handling can be hazardous to health and causes of fire or explosion, safety precautions included with Product Data / Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

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**Disclaimer**

The information in this product data sheet is given to the best of our knowledge based on laboratory testing and practical experience. If the product is used under condition beyond our control, we cannot guarantee anything but the quality of the products it self. The information in this product data sheet is liable for modification from time to time in the light of experience and our policy of continuous product development, and without further notice.

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