Technical Data Sheet

**Product Name:**
Thermochromic Paint
Non-Reversible Thermal Indicating Paint - ColourTherm

**Product Number:**
Refer to Properties Table

**Product Description:**
Thermochromic Paints are designed to change colour at specific temperatures giving a visual indication of a temperature change. This can be used for activities such as safety indicators on thermally sensitive systems, indication of the thermal history or R&D components, over temperature safety indicators in the petrochemical industry etc.

These paints function by the action of chemical change within solid components of the coating. The colour change is non-reversible within this range. The paints are designed to be thermally stable when used below their first temperature change level. When the coatings approach their first colour change the reaction will occur quickly at the specified temperature or gradually if the paint is held within a few tens of degrees of the change temperature.

**Approvals/Specifications:**
This range of coatings is designed for use in industrial applications only.

End users must ensure that the coating is suitable for their application prior to use.

**Performance:**
The colour change temperatures shown in the table are an indication only. In service the running temperature of a coated unit and time will play a role in the speed and accuracy of the temperature indication. For applications where the indicator temperature is close to the running temperature the thermal indicating paint should be tested to ensure that the correct properties are obtained.

The CT-Range is not designed to be colour stable for external applications. Please refer to our Technical Department for advice when specifying these coatings in environmentally exposed applications.
## Technical Data Sheet

### Colour Change Temperature Degrees Centigrade (°C)

<table>
<thead>
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<th>Product Code</th>
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<th>150</th>
<th>250</th>
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<td>CT-9602</td>
<td>Thinner for CT Non-Reversible Colour Range</td>
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</table>

*When heated over an extended period, undergoes colour change at lower temperatures; for example, at 68°C, it changes to purple in 24 hours.

### Examples of the visual colour changes exhibited by our Non-Reversible Thermochromic Paint Range, in response to temperature rise.

*Once subject to heating, paints will permanently change colour.*

Heated within 10 minutes to temperature shown or above. Changes may occur at lower temperatures if heated over long periods.

**Temperatures shown in degrees centigrade.**

*Special order products. Not stocked*

For demonstrative purposes only, colours may vary.

### Components:

Single Pack Air Drying coatings that can be used on internal and external applications.

For external applications, a clear protective coating may be applied to ensure longevity of the coating colour.
**Application:**

**Surface Preparation:** All surfaces must be clean, dry and dust free. A suitable primer may be used where substrate protection and thermal indication properties are required.

**Paint Preparation:** Stir well before use. All separated material must be re-incorporated into the bulk product. No time limits are specified for the mixing operation. The operator must be satisfied that the product including any thinning solvent is thoroughly mixed before use. Where mechanical mixing is employed care must be taken to not heat the product to above the maximum storage temperature. Mixing in open containers should be limited to <10 minute periods to ensure that solvent evaporation does not compromise the product. Shaking or rolling in closed containers is an acceptable mixing method for small volume products supplied ready for use.

**Application Method:** Apply by spray, brush or roller

**Drying Curing:**

**Air Dry:**
- **Touch Dry:** 2-3 hours
- **Hard Dry:** 16-24 hours

**Storage:** Highly flammable liquid: store and use in accordance with the flammable liquid regulations

**Shelf Life:** 12 months temperate; 6 months tropical

**Before use, refer to Product Safety Data Sheet**

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**Safety Data Sheets:** For Safety Data Sheets please contact our Sales Department:

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