

## Technical Product Information

Thermochromic Function: Quasi-Irreversible  
Product Name: **SC80**  
Last Revision: 08/03/2018

### Description:

**SC80 is a solvent based paint for professional use in scientific research and development showing a temperature related colour change. The temperature at which thermal paints change colour is related to the length of time exposed as well the actual temperature. A longer period of heating can initiate the same colour change that would occur after a short exposure at a higher temperature.**

The initial colour is off white / pink and after 10 minutes heating at 80°C it will change to blue. The paint should have a safe running temperature (i.e. no colour change will be seen) of 55°C, but this is predicted and not proven.

It should be noted that is paint is quasi-reversible and the blue colour can fade with time if moisture is absorbed from the atmosphere. It will be unsuitable for outdoor use.

### Technical Details

<b>Pigments</b>	<b>Thermochromic with irreversible colour change</b>
<b>Binders</b>	<b>Acrylic</b>
<b>Solids by weight</b>	<b>42.5%</b>
<b>VOC</b>	<b>656 g/l</b>
<b>Solvent</b>	<b>PMA, Xylene</b>
<b>Flash Point</b>	<b>30°C (Pensky Martin closed cup)</b>
<b>Drying method</b>	<b>Solvent evaporation. Touch dry typically 20-30 minutes depending on ventilation / coating thickness.</b>
<b>Coverage</b>	<b>Giving 30u dry film allow 13-15 sqm per litre of paint</b>
<b>Application.</b>	

Paint may settle on storage and should be thoroughly stirred before use. Viscosity can be reduced by adding PMA solvent (CAS 108-65-6).

Before use the test surface should be thoroughly cleaned by removing all traces of grease, oil and loose material. Application direct to the metal surface is preferred method. If any kind of primer has previously been applied this should be carefully evaluated to ensure it is not affected by the thermal paint and in turn does not affect the colour change properties and adhesion of the thermal paint when heated. Zinc based primers have been used with thermal paint but compatibility should always be tested.

Information in this Product Data Sheet is compiled from our general experience and data obtained from various technical publications. Whilst we believe that the information provided herein is accurate at the date hereof, no responsibility for its completeness or accuracy can be assumed. Tests are carried out under controlled laboratory conditions. Information is given in good faith, but without commitment as conditions vary in every case. The information is provided solely for consideration, investigation and verification by the user. We do not except any liability for any loss, damage or injury resulting from its use (except as required by law). Please refer to the Material Safety Data Sheet before using products to ensure safe handling.

**A single coat of paint should be applied to give an opaque covering. Typically a 30u coat will be suitable. The coating should be completely dry before heating – allow 24 hours.**

<b>Initial</b>	<b>80°C</b>
	

**Further calibration details are not currently available for this paint.**

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