

## Title: Thermal Paint for Brake Pads

### Sector: Automotive

### Introduction/Project

Since 2003 a leading brake pad manufacturer has been using Single Colour Change Paints as part of their brake abuse indicating system, that conditionally guarantees the brake pad for 50,000km.



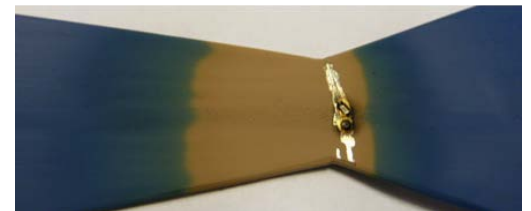
### Aim:

To provide the brake pad installer with a system that can accurately check if the brake pads were exposed to very high temperatures, caused by on-going abusive braking by the driver.



### Solution:

Four different temperature ranges, 80, 155°C, 240°C and 275°C are painted on to the backing plate of the brake pad. Once the brake pads reach a certain temperature, the colour of the paint changes.



The key to effectively using the system is the check card that is being supplied to all garages, workshops and fitment centres that fit the brake pads. The check card matches the colours of the heat sensitive paint dots with colour combinations which indicate if the brake pad was subjected to extreme heat situations. This can be done in the presence of the customer and shows the validity of the guarantee - indicated as 50 000 km, 40 000 km, 30 000 km, 20 000km or no guarantee due to heavy abusive braking.

**NB. We believe a patent has been applied for on this system and recommend that checks should be made to ensure that this is not valid in your country before approaching similar manufacturers.**

