ADA3202 Product Data Sheet

UV-Visible Thermo-Fluorescent Red Organic Dye

Application: Marking, Coding, Security Printing

ADA3202 is a reversible deep temperature thermo-fluorescent speciality product having a very unique easy to implement fluorescent effect. In normal daylight conditions, ADA3202 powder is slightly yellowish on paper. On exposure to UV-A light at room temperature no fluorescent effect or color change can be observed, however at -50°C bright red (optimal effect achieved at approx. 365 nm), fluorescence intensity becomes visible (emission at approx. 618 nm). The red UV-A (365 nm) fluorescence disappears reversibly within a couple of seconds after the dye warms up to room temperature. The cooling effect can be easily achieved with cooling spray.

ADA3202 powder is thus a highly effective special additive for coding and marking purposes (e.g. usage in novel security printing). Possible application fields are high quality, solvent-free or solvent-containing special printing inks and lacquers.

Product Properties

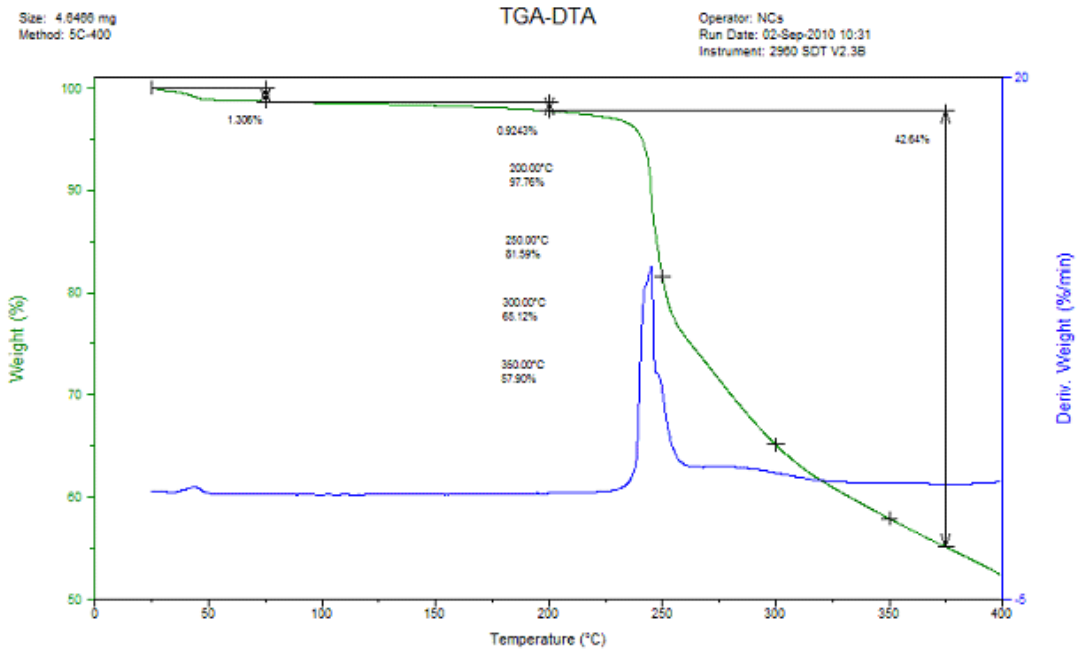
Composition:	Organic Substance
Physical Appearance:	Yellow/White Powder
Fluorescent color at 365nm @ room temperature:	No Fluorescent Activity
Fluorescent color at 365nm @ -50 °C	Red
Odor:	Odorless
Density in powder form:	Approx. 0.53 kg/dm^3
Thermal Stability:	200-220^0 C
UV Intensity @ -50 °C :	Good
Light fastness:	Medium

Solubility at T=22^{o}C, t=2h in:	(deviation approx. ± 5%)
Water (pH 7):	2.0 g/L
Acetone:	70.0 g/L
Ethyl Acetate:	Insoluble
Xylene:	4.4 g/L
Methanol:	Insoluble
Cyclohexanone:	Insoluble

Typical Luminescent Properties:

Abs. Max.; λ max:	390nm
Emission Max, λ max:	618nm

Thermal Stability



All applications using this product should be thoroughly tested prior to approval for production.

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