



anthraquinone dye

pigment

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History



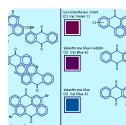
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anthraquinone dye, any of a group of organic dyes having molecular structures based upon that of [anthraquinone](#). The group is subdivided according to the methods best suited to their application to various fibres.

Anthraquinone acid dyes contain [sulfonic acid](#) groups that render them soluble in water and [substantive](#) for wool and silk; that is, they have an [affinity](#) for these fibres without the aid of [auxiliary](#) binding agents (mordants).

Anthraquinone disperse dyes lack the water-solubilizing groups of the acid dyes, but they are adsorbed by hydrophobic fibres such as nylon or acetate rayon with the aid of soap or other agents that keep the [dye](#) suspended in the application bath.



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dye: Anthraquinone dyes

In several [mordant dyes](#), the anthraquinone structure contains hydroxyl groups that participate in binding the dye to fibres such as cotton, wool, or silk that have been previously impregnated with the oxide of a metal such as aluminum, iron, tin, or chromium.

The anthraquinone vat dyes, [valued](#) for their brilliant colours and fastness to light and washing, are insoluble in water but become soluble upon treatment with a reducing agent, usually sodium hydrosulfite. The soluble vat or leuco form is adsorbed by the fibre and is then converted back to the insoluble form.

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