

What do these terms mean?

Light resistance

The light resistance or non-fade properties of a colouring agent or dye describes the permanence of colour when exposed to light in the long term, particularly to light with a high share of UV. The effect of light rays over the longer term can cause various changes in material such as yellowing, brittleness or fading.

How do we determine the level of light resistance?

The **Wool Scale** is the most common method to determine the light resistance level of a colour. The scale ranges from 1 to 8, with level 8 being the highest level of light resistance. The wool scale is based on the characteristics of different colouring agents as they fade at different rates when subject to sun ray exposure. The rates are shown in various coloured threads (wool) that have been exposed to sunlight. The wool scale is an important classification tool from the textile industry which is primarily used in the printing industry to assess light resistance in printed materials such as posters, labels etc.

Sometimes a 5-level rating using stars is used. 0 stars at level 1 or 2 indicates non light resistance, one star at level 3 indicates low light resistance, two stars at level 4 indicates limited light resistance, three stars at levels 5 and 6 indicates light resistance, four stars at level 7 indicates high level of light resistance and five stars at level 8 indicates the highest levels of light resistance. Colours at level 7 (4 stars) must be able to withstand 1 year of sunlight outdoors without any fading.

Normal paper and cardboard quality have a light resistance factor between level 2 and 4.

What are the minimum values set by archiving standards?

According to DIN ISO 16245 standards, a minimum value for light resistance is defined as at least level 5 on the wool scale.

Our guaranteed age-resistant premium products REGIboard and Archiv-Solid-Karton have been further developed to meet these standards and their colours won't be affected when exposed to light over the longer term.