

## Red wood extract

<b>Botanical name</b>	Caesalpinia Crista, Caesalpinia Echinata
<b>Origin</b>	Middle- and South America
<b>Colour</b>	Natural dyeing material - red colour

### Specification (all values according to the filter method)

colour	red brown
Natural dyestuff %	Ø 40.0
insolubles %	< 1.0
pH (10% liquid)	6.0 +/- 1.0
humidity %	8.0 +/- 3.0

### Description

Brazilian Red Wood extract is a natural wood extract which is coming from the trunk of Caesalpiniaceous Crista, Caesalpinia Echinacea or Caesalpiniaceous Brailiensis and is classified in the group of neoflavonoid plants and belongs to the soluble Red Woods. Its height is approximately 80 meters, with a diameter of 3 meters. These trees can be up to 2000 years old. They then reach a diameter of approx. 7 meters.

These trees grow in Middle- and South America. Insoluble Red Wood is for example 'Sandal Wood', 'Cam Wood' or 'Coral Wood'. The Red Wood is coming mostly from Brazil or Jamaica. The wood which is of yellow colour is coming from the inner part of the trunk which is resistant to insects and fungus. The other parts of the trunk are coloured red and contain the dyeing substance called brasilin, which is modified by oxidation of the leuco-connections to the original dyestuff brasilin. This is very closely related to the dyeing stuff of 'Blue Wood', the haematoxylins, respective Haematoxylin. Both are neoflavonoides. Pure brasilin is building silver-grey, glazing/rhombic flakes, which are hardly soluble in cold water. They are easily soluble in hot water and alkaline substances.

The dyestuff can be traced by making water dilutions out of scrapings of the wood; after spray-drying the dilution, it is finally modified to powder form. First the watered dilutions are of yellow colour. Afterwards they will get a reddish colour by oxidation. Dilutions of older woods are reddish from beginning on. This is caused by more dyestuff in comparison to younger woods. By adding acid, the colour will change more to yellow and by adding alkaline solutions colour changes to stronger red. With adding salts it precipitates to different lacquers. Stannic salts will let it have carmine-red sediment, and iron-vitriol will let it have violet sediments. Already dyed materials are very sensitive to acids and alkaline solutions. Dyed materials are not very light stable in comparison to synthetic dyeing agents. To get more stable colouring results, we are selling modified Red Wood Extracts.

### Applications

Red Wood dyestuff can be used similarly as a synthetic dyestuff either in a chrome- or vegetable leather dyeing process. Further applications are the dyeing of textiles, wool, cotton, wood and paper as well as a colouring marker in the micro surgical field.