

Manufacture of All Kinds of Auto loom Fabrics and Natural Dye Fabrics.

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## **Juglone**

Juglone		
OH O		
General		
Systematic name	5-hydroxy-1,4-naphthalenedione	
Other names	5-hydroxy-1,4-naphthoquinone 5-hydroxy- <i>p</i> -naphthoquinonejuglone regianin	
Molecular formula	C <sub>10</sub> H <sub>6</sub> O <sub>3</sub>	
SMILES	CC2=CC(C1=C(O)C=CC=C1C2=O)=O	
Molar mass	174.15 g/mol	
Appearance	yellow solid	
CAS number	[481-39-0]	

Hazards		
MSDS	External MSDS	
R/S statement	R: R25 S: S28A S45	
RTECS number	QJ5775000	
Related compounds		
Related compounds quinone		
Except where noted otherwise, data are given for materials in their standard state (at 25 °C, 100 kPa) Infobox disclaimer and references		

**Juglone** is an aromatic organic compound with the molecular formula C<sub>10</sub>H<sub>6</sub>O<sub>3</sub>.

Juglone is found naturally in the leaves, roots and bark of plants in the Juglandaceae family, particularly the black walnut. Juglone is an allelopathic compound, meaning it is synthesized by one type of plant and affects the growth of another. In the case of juglone, it is toxic or growth stunting to many types of plants. Landscapers have long known that gardening underneath or near black walnut trees can be difficult. Juglone exerts its affect by inhibiting certain enzymes needed for metabolic function. It is occasionally used as an herbicide.

Because of its tendency to create dark orange-brown stains, juglone has also found use as a coloring agent for foods and cosmetics, such as hair dyes. It is known in the food industry as **C.I. Natural Brown 7** or **C.I. 75500**. Traditionally, juglone has been used as a natural dye for clothing and fabrics, particularly wool, and as ink. Its other names are **luglon**, **Juglane**, **Nucin**, **Regianin**, **Walnut extract**, **Yuglon**, **NCI 2323**, **Oil Red BS** and **1,4-naphthoguinone**. It is an isomer of **Lawsone**.