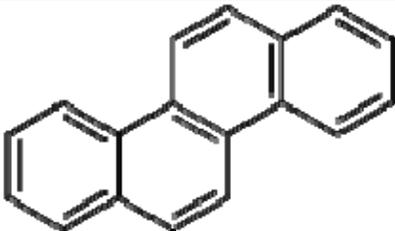


# Chrysene

Chrysene <sup>[1]</sup>	
	
<a href="#">IUPAC name</a>	Chrysene
<a href="#">Other names</a>	Benzo[a]phenanthrene 1,2-Benzphenanthrene
Identifiers	
<a href="#">CAS number</a>	[218-01-9]
<a href="#">PubChem</a>	10457109
<a href="#">EC number</a>	205-923-4
<a href="#">RTECS number</a>	GC0700000
<a href="#">SMILES</a>	<chem>C12=CC=CC=C1C3=C(C(C=CC=C4)=C4C=C3)C=C2</chem>
<a href="#">InChI</a>	1/C18H12/c1-3-7-15-13(5-1) 9-11-18-16-8-4-2-6-14 (16)10-12-17(15)18/h1-12H
Properties	
<a href="#">Molecular formula</a>	C <sub>18</sub> H <sub>12</sub>
<a href="#">Molar mass</a>	228.28
<a href="#">Appearance</a>	Orthorhombic bipyramidal plates

<a href="#">Density</a>	1.274 g/cm <sup>3</sup>
<a href="#">Melting point</a>	254 °C, 527 K, 489 °F
<a href="#">Boiling point</a>	448 °C, 721 K, 838 °F
<a href="#">Solubility in water</a>	Insoluble
<a href="#">Solubility in Ethanol</a>	1 mg/1300 mL
Except where noted otherwise, data are given for materials in their <a href="#">standard state</a> (at 25 °C, 100 kPa)	

**Chrysene** is a [polycyclic aromatic hydrocarbon](#) (PAH) with the molecular formula C<sub>18</sub>H<sub>12</sub> that consists of four fused [benzene](#) rings. It is a natural constituent of [coal tar](#), from which it was first isolated and characterized. It is also found in [creosote](#), a chemical used to preserve wood.

Chrysene is formed in small amounts during the burning or distillation of coal, crude oil, and plant material.

The name "chrysene" originates from Greek *Χρῦσος* (*chrysos*), meaning "gold", and is due to the golden-yellow color of the crystals of the hydrocarbon, thought to be the proper color of the compound at the time of its isolation and characterization. However, high purity chrysene is colorless, the yellow hue being due to the traces of its yellow-orange isomer [tetracene](#), which cannot be separated easily.

## Use

Chrysene is used in the manufacture of some dyes.

## Safety

As with other PAHs, chrysene is suspected to be a human carcinogen. It is known to cause cancer in laboratory animals.<sup>[2]</sup>

## See also

- [Pyrene](#)
- [Tetracene](#)
- [Triphenylene](#)

## References

1. *Merck Index*, 11th Edition, **2259**.
2. [TOXICOLOGICAL PROFILE FOR POLYCYCLIC AROMATIC HYDROCARBONS](#)

<a href="#">v</a> · <a href="#">d</a> · <a href="#">e</a>	<b><u>Polycyclic aromatic hydrocarbons</u></b>
<b>2 rings</b>	<a href="#">Azulene</a> · <a href="#">Naphthalene</a>
<b>3 rings</b>	<a href="#">Acenaphthylene</a> · <a href="#">Anthracene</a> · <a href="#">Fluorene</a> · <a href="#">Phenanthrene</a>
<b>4 rings</b>	<a href="#">Chrysene</a> · <a href="#">Fluoranthene</a> · <a href="#">Pyrene</a> · <a href="#">Tetracene</a> · <a href="#">Triphenylene</a>
<b>5+ rings</b>	<a href="#">Anthanthrene</a> · <a href="#">Benzo[a]pyrene</a> · <a href="#">Corannulene</a> · <a href="#">Coronene</a> · <a href="#">Dicoronylene</a> · <a href="#">Helicene</a> · <a href="#">Hexacene</a> · <a href="#">Ovalene</a> · <a href="#">Pentacene</a> · <a href="#">Picene</a> · <a href="#">Perylene</a>

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Categories: [Polycyclic aromatic hydrocarbons](#)