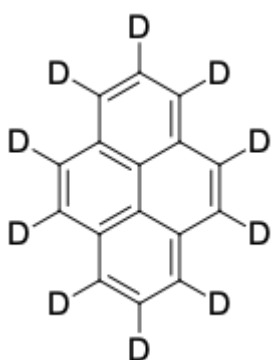


## Pyrene-d10

<http://www.lumiprobe.com/p/pyrene-d10>

Pyrene-d10 is a deuterated analog of pyrene, used extensively as an internal standard in various spectroscopic studies. It is specifically valuable in research involving polycyclic aromatic hydrocarbons (PAHs), where it assists in quantitative analysis through techniques such as gas chromatography-mass spectrometry (GC-MS).

In environmental studies, Pyrene-d10 is employed to track the presence and transformation of pyrene in soil, water, and air samples, helping scientists understand the distribution and fate of PAHs in the environment. Additionally, its stable isotopic labeling is exploited in the study of molecular dynamics and in the elucidation of complex mechanisms of chemical reactions. In material science, Pyrene-d10 is used in the investigation of organic semiconductors, where its fluorescence properties enable researchers to probe the behavior of pyrene in various matrices and conditions.



**Structure of Pyrene-d10**

### General properties

Appearance: white solid

Molecular weight: 212.31

CAS number: 1718-52-1

Molecular formula: C<sub>16</sub>D<sub>10</sub>

Quality control: NMR <sup>1</sup>H and HPLC-MS (95+ %, D: 98+ %)

Storage conditions: 24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.