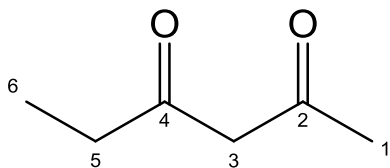


## Answer on Question#64895 – Chemistry – Organic chemistry

### Question:

Why is C<sub>6</sub>H<sub>10</sub>O<sub>2</sub> (<http://www.chemspider.com/ImagesHandler.ashx?id=68832&w=250&h=250>) named as Hexane-2,4-dione instead of Hexa-2,4-dione?

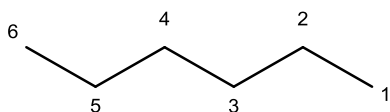
### Answer:



Hexane-2,4-dione

Diketones take their name from their parent alkane chains. The ending **-dione** is added to **the end of the parent chain**. Both carbonyls require a location number.

Here, the parent alkane is **hexane**.



hexane

**Hexane** + 2,4-dione = **hexane**-2,4-dione, not hexa-2,4-dione. *Hexa-2,4-dione* is a mistake, because parent chain **hexa** doesn't exist.

Answer provided by <https://www.AssignmentExpert.com>