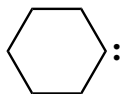


carbenes

The electrically neutral species $\text{H}_2\text{C:}$ and its derivatives, in which the carbon is covalently bonded to two univalent groups of any kind or a divalent group and bears two nonbonding electrons, which may be spin-paired (singlet state) or spin-non-paired (triplet state). In systematic name formation, carbene is the name of the parent hydride $:\text{CH}_2$; hence, the name dichlorocarbene for $:\text{CCl}_2$. However, names for acyclic and cyclic hydrocarbons containing one or more divalent carbon atoms are derived from the name of the corresponding all- λ^4 -hydrocarbon using the suffix -ylidene.

E.g. prop-2-en-1-ylidene, $\text{CH}_2=\text{CHCH:}$ ethenylidene, $\text{H}_2\text{C}=\ddot{\text{C}}$; cyclohexylidene,



Subclasses of carbenes include *acyl carbenes* $\text{RC}(=\text{O})\ddot{\text{C}}\text{R}$, *imidoyl carbenes*, $\text{RC}(=\text{NR})\ddot{\text{C}}\text{R}$ and *vinyl carbenes*.

1995, 67, 1324; see also 1994, 66, 1092