

coordination number

1. The coordination number of a specified atom in a chemical species is the number of other atoms directly linked to that specified atom. For example, the coordination number of carbon in methane is four, and it is five in protonated methane, CH_5^+ . (The term is used in a different sense in the crystallographic description of ionic crystals.)

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1100

2. In an inorganic coordination entity, the number of σ -bonds between ligands and the central atom. π -bonds are not considered in determining the coordination number.

Source:

Red Book, p. 146