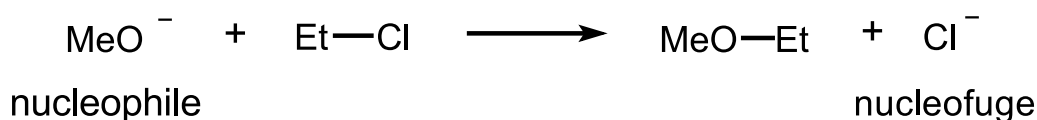


## nucleophile (nucleophilic)

A nucleophile (or nucleophilic reagent) is a reagent that forms a bond to its reaction partner (the electrophile) by donating both bonding electrons. A 'nucleophilic substitution reaction' is a heterolytic reaction in which the reagent supplying the entering group acts as a nucleophile. For example:



The term 'nucleophilic' is also used to designate the apparent polar character of certain radicals, as inferred from their higher relative reactivity with reaction sites of lower electron density. Nucleophilic reagents are Lewis bases.

**Source:**

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1146