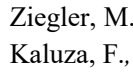
>>**Entry Name: Phenylacetylene**
**Synonym(s):** Ethynylbenzene, 9CI, 8CI. Phenylethyne

**CAS Registry Number:** 536-74-3



**Molecular Formula:** $C_8H_6$
**Molecular Weight:** 102.135
**Accurate Mass:** 102.04695
**Percentage Composition:** C 94.08%; H 5.92%
**Source/Synthesis:** Found in coal tar
**Use/Importance:** Used as a 10% soln. in $CH_2Cl_2$ for extraction-photometric detn. of Pd ($\lambda_{max}$ 317 nm)
**Physical Description:** Oil
**Melting Point:** Fp –45°
**Boiling Point:** Bp 142°. $Bp_{13}$ 35-36°
**Solubility:** Sol. $Me_2CO$, $CHCl_3$, $C_6H_6$, EtOH, $Et_2O$; insol. $H_2O$
**Density:** $d^{12.5}$ 0.94
**Refractive Index:** $n_D^{20}$ 1.5490
**Hazard & Toxicity:** Flammable, fl. p. 31°. Polym. violently in presence of $Pd(OAc)_2$. Undergoes radical polym. Q/e values for copolym., Q 0.68, e 0.70

**Aldrich:** 11770-6
**Fluka:** 77840
**Sigma:** P6514

**References:**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