



>>Entry Name: 1,2-Dichloroethylene

Synonym(s): 1,2-Dichloroethene, 9Cl. Acetylene dichloride. Dioform. R1130

CAS Registry Number: 540-59-0

Extra CAS Registry Numbers(s): 25323-89-1

ClHC=CHCl

Molecular Formula: C₂H₂Cl₂

Molecular Weight: 96.943

Accurate Mass: 95.953354

Percentage Composition: C 24.78%; H 2.08%; Cl 73.14%

Use/Importance: Solvent, degreasant

Physical Description: Liq. with ethereal odour

Boiling Point: Bp 55°

Other Data: Gradually dec. by air and light. Undergoes radical homopolym. with difficulty but readily forms copolymers with some vinyl monomers

Hazard & Toxicity: OES: long-term 200 ppm; short-term 250 ppm (*E:Z*, 40:60)

Aldrich: D6240-3

Rare Chemicals Library: S43052-8

>>Variant: (*E*)-form

CAS Registry Number: 156-60-5

Molecular Formula: C₂H₂Cl₂

Molecular Weight: 96.943

Accurate Mass: 95.953354

Percentage Composition: C 24.78%; H 2.08%; Cl 73.14%

Use/Importance: Used in synth. of (*E,E*)-1-chloro-1,3-dienes

Physical Description: Liq.

Melting Point: Mp -50°

Boiling Point: Bp 48.4°. Bp₇₄₅ 47°

Solubility: Sl. sol. H₂O; misc. EtOH, Et₂O, Me₂CO, CHCl₃

Density: d₄¹⁵ 1.265

Refractive Index: n_D¹⁵ 1.4490

Other Data: Slowly oxidises on exp. to light and air

Hazard & Toxicity: Highly flammable, fl. p. 2°, autoignition temp. 460°. With strong alkalis forms spont. flammable HC≡CCl

Aldrich: D6220-9

Fluka: 35140

Rare Chemicals Library: S44613-0

Sigma: D3419

Supelco: R43-0300

>>Variant: (*Z*)-form

CAS Registry Number: 156-59-2

Molecular Formula: C₂H₂Cl₂

Molecular Weight: 96.943

Accurate Mass: 95.953354

Percentage Composition: C 24.78%; H 2.08%; Cl 73.14%

Physical Description: Liq.

Melting Point: Mp -80°

Boiling Point: Bp 60°

Solubility: Sl. sol. H₂O; misc. EtOH, Et₂O, Me₂CO, CHCl₃

Density: d₄¹⁵ 1.291

Refractive Index: n_D²⁵ 1.4435

Hazard & Toxicity: Highly flammable, fl. p. 6°, autoignition temp. 441°. High vapour concs. irritating and narcotic. Exp. hepatotoxic and nephrotoxic effects

Aldrich: D6200-4

Fluka: 35130

Rare Chemicals Library: S43634-8

Sigma: D6552

Supelco: 4-8597

References: