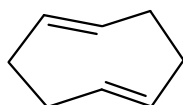




>>Entry Name: 1,5-Cyclooctadiene, 9CI



(E,E)-form

CAS Registry Number: 111-78-4

Extra CAS Registry Numbers(s): 29965-97-7

Molecular Formula: C₈H₁₂

Molecular Weight: 108.183

Accurate Mass: 108.0939

Percentage Composition: C 88.82%; H 11.18%

Aldrich: 24605-0

>>Variant: *(E,E)*-form

Molecular Formula: C₈H₁₂

Molecular Weight: 108.183

Accurate Mass: 108.0939

Percentage Composition: C 88.82%; H 11.18%

Other Data: Polym. rapidly in the presence of oxygen or acid or in conc. soln. A dil. soln. in pentane is stable at –20° for several hr.

>>Variant: (–)-*(E,Z)*-form

CAS Registry Number: 5259-72-3

Molecular Formula: C₈H₁₂

Molecular Weight: 108.183

Accurate Mass: 108.0939

Percentage Composition: C 88.82%; H 11.18%

Melting Point: Mp –70.1°

Optical Rotation: [α]_D –160 (c, 1.5 in CHCl₃)

>>Variant: (±)-*(E,Z)*-form

CAS Registry Number: 10092-71-4

Molecular Formula: C₈H₁₂

Molecular Weight: 108.183

Accurate Mass: 108.0939

Percentage Composition: C 88.82%; H 11.18%

Melting Point: Mp –62°

Other Data: With I₂ → *(Z,Z)*-isomer

>>Derivative: AgNO₃ complex

Physical Description: Cryst. (MeOH/Et₂O)

Melting Point: Mp 180-181 dec.°

>>Variant: *(Z,Z)*-form

CAS Registry Number: 1552-12-1

Molecular Formula: C₈H₁₂

Molecular Weight: 108.183

Accurate Mass: 108.0939

Percentage Composition: C 88.82%; H 11.18%

Use/Importance: Manuf. by catalytic dimerisation of butadiene

Melting Point: Mp –56.4°

Boiling Point: Bp 151-152°

Density: d₄²⁰ 0.883

Refractive Index: n_D²⁰ 1.4930

Other Data: Undergoes W-catalysed ring-opening polym. to give polybutenamers

Hazard & Toxicity: Flammable, fl.p. 35°. Eye and severe skin irritant

Fluka: 29580

References: