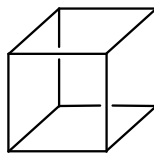




>>Entry Name: Cubane

Synonym(s): Pentacyclo[4.2.0.0^{2,5}.0^{3,8}.0^{4,7}]octane. [4]Prismane



CAS Registry Number: 277-10-1

Molecular Formula: C₈H₈

Molecular Weight: 104.151

Accurate Mass: 104.0626

Percentage Composition: C 92.26%; H 7.74%

General Statement: One of the three saturated (CH)₈ hydrocarbons. See also Pentacyclo[5.1.0.0^{2,4}.0^{3,5}.0^{6,8}]octane [CZW24-C](#) and Pentacyclo[3.3.0.0^{2,4}.0^{3,7}.0^{6,8}]octane [CZW18-D](#)

Physical Description: Glistening rhombs

Melting Point: Mp 130-131° (sealed capillary)

Solubility: Sol. hexane (18% w/w at r.t.)

Other Data: Slow dec. >220°. Vp 1.1 mm at 25°. Heat of formation 144 (159) Kcal mol⁻¹. Strain energy 166 (181) Kcal mol⁻¹. Nontoxic. C-C distance 1.5727|a; C-H distance 1.118|a. Chemically very inert. Acidic hydrocarbon

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Bischof, P. *et al.*, *Helv. Chim. Acta*, 1978, **61**, 547
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