



>>Entry Name: Trichloro(η^5 -2,4-cyclopentadien-1-yl)titanium, 10Cl

Synonym(s): Cyclopentadienyltitanium trichloride

CAS Registry Number: 1270-98-0

As Tribromo(η^5 -2,4-cyclopentadien-1-yl)titanium, BQF10-S with
X = Cl

Molecular Formula: C₅H₅Cl₃Ti

Molecular Weight: 219.333

Accurate Mass: 217.893628

Percentage Composition: C 27.38%; H 2.30%; Cl 48.49%; Ti 21.83%

Source/Synthesis: Synth. from TiCl₄ and TiCpCl₂ in xylene

Use/Importance: Catalyst in many reactions, eg. for syndiotactic polym. of styrene; with LiAlH₄, reagent of McMurry system for reductive dimerisation of ketones, aldehydes
→ diols; co-catalyst for cyclooligomerisation of dienes

Biological Use/Importance: Used in DNA binding; possesses antitumour activity

Physical Description: Orange-yellow cryst.

Melting Point: Mp 208-211°

Solubility: Sol. toluene, dichlorobenzene, xylene, CH₂Cl₂, CHCl₃, Et₂O, THF, similar aprotic solvs.

Other Data: Sensitive to hydrol.

Aldrich: 23483-4

Fluka: 29677

References:

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