

Bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper

Other names:	Copper dipivaloylmethane Copper, bis(2,2,6,6-tetramethyl-3,5-heptanedionato-O,O')- Copper,bis(3,5-heptanedionato-2,2,6,6-tetramethyl) copper, bis(2,2,6,6-tetramethyl-3,5-heptanedionato-O3,O5)-
Inchi:	InChI=1S/2C11H20O2.Cu/c2*1-10(2,3)8(12)7-9(13)11(4,5)6;/h2*7,12H,1-6H3;/q;;;+2/p-2/
InchiKey:	VCIKJQZFNVXWPF-ATMONBRVSA-L
Formula:	C22H38CuO4
SMILES:	CC(C)(C)C(=O)C=C([O-])C(C)(C)C.CC(C)(C)C(=O)C=C([O-])C(C)(C)C.[Cu]
Mol. weight [g/mol]:	430.08
CAS:	14040-05-2

Physical Properties

Property code	Value	Unit	Source
hsub	129.10 ± 0.80	kJ/mol	NIST Webbook
hsub	122.80 ± 6.50	kJ/mol	NIST Webbook
ie	7.40	eV	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	127.20 ± 1.70	kJ/mol	351.00	NIST Webbook
hsubt	123.60	kJ/mol	445.50	NIST Webbook
hsubt	124.60	kJ/mol	407.00	NIST Webbook
hsubt	124.50 ± 0.80	kJ/mol	372.00	NIST Webbook
hsubt	74.80	kJ/mol	415.00	NIST Webbook
hsubt	100.00	kJ/mol	403.50	NIST Webbook
hsubt	120.00	kJ/mol	448.00	NIST Webbook
hsubt	127.60 ± 0.40	kJ/mol	361.00	NIST Webbook
hvapt	77.80 ± 0.80	kJ/mol	493.50	NIST Webbook
psub	2.37e-03	kPa	435.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)

psub	1.46e-03	kPa	425.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)
psub	7.20e-04	kPa	415.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)
psub	3.43e-04	kPa	404.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)
psub	1.51e-04	kPa	395.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)
psub	7.20e-05	kPa	385.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)
psub	4.00e-05	kPa	375.00	Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II)

Sources

Vapor pressure, kinetics and enthalpy of sublimation of bis(2,2,6,6-tetramethyl-3,5-heptanedionato)copper(II): <https://www.doi.org/10.1016/j.tca.2009.05.014>
Solubility of beta-Diketonate Complexes of Copper(II) and Cobalt(II): <https://www.doi.org/10.1021/jc101255v>
NIST Webbook Carbon Dioxide: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C14040052&Units=SI>

Legend

hsub: Enthalpy of sublimation at standard conditions
hsubt: Enthalpy of sublimation at a given temperature
hvapt: Enthalpy of vaporization at a given temperature
ie: Ionization energy
psub: Sublimation pressure

Latest version available from:

<https://www.chemeo.com/cid/15-763-8/Bis-2-2-6-6-tetramethyl-3-5-heptanedionato-copper-II.pdf>

Generated by Cheméo on 2025-12-05 14:01:19.702141361 +0000 UTC m=+4691477.232182025.

Cheméo (<https://www.chemeo.com>) is the biggest free database of chemical and physical data for the process industry.