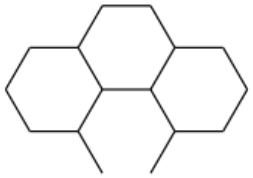
Phenanthrene, tetradecahydro-4,5-dimethyl-

Other names: 1,3-dimethyltricyclo[8.4.0.0(2,6)]tetradecane.
InChI: InChI=1S/C16H28/c1-11-5-3-7-13-9-10-14-8-4-6-12(2)16(14)15(11)13/h11-16H,3-10H2,1-2H3
InChI Key: LRCLMXSQZAMLRS-UHFFFAOYSA-N
Formula: C16H28
SMILES: CC1CCCC2CCC3CCCC(C)C3C12
Molecular Weight: 220.39
CAS: 56292-68-3



Physical Properties

Property	Value	Unit	Source
$\Delta_f G°$	182.46	kJ/mol	Joback Method
$\Delta_f H°_{gas}$	-246.99	kJ/mol	Joback Method
$\Delta_{fus} H°$	24.31	kJ/mol	Joback Method
$\Delta_{vap} H°$	50.88	kJ/mol	Joback Method
$log P_{oct/wat}$	4.89		Crippen Method
P_c	1829.41	kPa	Joback Method
T_{boil}	593.04	K	Joback Method
T_c	816.70	K	Joback Method
T_{fus}	293.58	K	Joback Method
V_c	0.76	m^3/kg-mol	Joback Method

Temperature Dependent Properties

Property	Value	Unit	Temperature (K)	Source
$C_{p,gas}$	587.04	J/mol×K	593.04	Joback Method
η	0.00	Pa×s	593.04	Joback Method

Sources

Joback Method: https://en.wikipedia.org/wiki/Joback_method
NIST Webbook: http://webbook.nist.gov/cgi/inchi/InChI=1S/C16H28/c1-11-5-3-7-13-9-10-14-8-4-6-12(2)16(14)15(11)13/h11-16H,3-10H2,1-2H3
Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

$\mathbf{C_{p,gas}}$: Ideal gas heat capacity (J/mol×K).
η: Dynamic viscosity (Pa×s).
$\Delta_f\mathbf{G°}$: Standard Gibbs free energy of formation (kJ/mol).
$\Delta_f\mathbf{H°_{gas}}$: Enthalpy of formation at standard conditions (kJ/mol).
$\Delta_{fus}\mathbf{H°}$: Enthalpy of fusion at standard conditions (kJ/mol).
$\Delta_{vap}\mathbf{H°}$: Enthalpy of vaporization at standard conditions (kJ/mol).
$\boldsymbol{log}\mathbf{P_{oct/wat}}$: Octanol/Water partition coefficient .
$\mathbf{P_c}$: Critical Pressure (kPa).
$\mathbf{T_{boil}}$: Normal Boiling Point Temperature (K).
$\mathbf{T_c}$: Critical Temperature (K).
$\mathbf{T_{fus}}$: Normal melting (fusion) point (K).
$\mathbf{V_c}$: Critical Volume (m^3/kg-mol).