Tris(dipropylamino)phosphine

Other names:	Tris(N,N-di-n-propylamino)phosphine
	P(N(n-C3H7)2)3
	Tris(dipropylamino)phosphine
	Hexa-n-propyl phosphorous triamide
	Phosphine, tris(dipropylamino)-
Inchi:	InChI=1S/C18H42N3P/c1-7-13-19(14-8-2)22(20(15-9-3)16-10-4)21(17-11-5)18-12-6/h7-1
InchiKey:	KPDXRSBWIPGWLS-UHFFFAOYSA-N
Formula:	C18H42N3P
SMILES:	CCCN(CCC)P(N(CCC)CCC)N(CCC)CCC
Mol. weight [g/mol]:	331.53

Physical Properties

Property code	Value	Unit	Source
hf	-124.64	kJ/mol	Cheméo Relay (1.0)
hvap	62.62	kJ/mol	Cheméo Relay (1.0)
ie	7.05	eV	NIST Webbook
log10ws	-2.99		Cheméo Relay (1.0)
logp	5.579		Crippen Method
mcvol	314.880	ml/mol	McGowan Method
tb	580.39	K	Cheméo Relay (1.0)
tf	226.77	K	Cheméo Relay (1.0)

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	419.50 ± 1.50	K	0.30	NIST Webbook

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C5848646&Units=SI
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws

Legend

hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tf:	Normal melting (fusion) point