

Tridecane, 2,5-dimethyl-

Other names:	2,5-Dimethyltridecane
Inchi:	InChI=1S/C15H32/c1-5-6-7-8-9-10-11-15(4)13-12-14(2)3/h14-15H,5-13H2,1-4H3
InchiKey:	WHEITGBIIYGVLM-UHFFFAOYSA-N
Formula:	C15H32
SMILES:	CCCCCCCC(C)CCC(C)C
Mol. weight [g/mol]:	212.41
CAS:	56292-66-1

Physical Properties

Property code	Value	Unit	Source
gf	70.54	kJ/mol	Joback Method
hf	-363.49	kJ/mol	Joback Method
hfus	27.56	kJ/mol	Joback Method
hvap	48.21	kJ/mol	Joback Method
log10ws	-5.62		Crippen Method
logp	5.809		Crippen Method
mcvol	222.210	ml/mol	McGowan Method
pc	1432.63	kPa	Joback Method
tb	541.72	K	Joback Method
tc	706.30	K	Joback Method
tf	228.81	K	Joback Method
vc	0.864	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	558.41	J/molxK	541.72	Joback Method
cpg	577.82	J/molxK	569.15	Joback Method
cpg	596.45	J/molxK	596.58	Joback Method
cpg	614.33	J/molxK	624.01	Joback Method
cpg	631.47	J/molxK	651.44	Joback Method
cpg	647.90	J/molxK	678.87	Joback Method
cpg	663.64	J/molxK	706.30	Joback Method
dvisc	0.0138942	Paxs	228.81	Joback Method

dvisc	0.0032300	Paxs	280.96	Joback Method
dvisc	0.0011857	Paxs	333.11	Joback Method
dvisc	0.0005709	Paxs	385.26	Joback Method
dvisc	0.0003272	Paxs	437.42	Joback Method
dvisc	0.0002112	Paxs	489.57	Joback Method
dvisc	0.0001483	Paxs	541.72	Joback Method

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C56292661&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.chemeo.com/cid/53-052-5/Tridecane-2-5-dimethyl.pdf>

Generated by Cheméo on 2024-05-01 05:20:21.025129609 +0000 UTC m=+16830069.945706924.

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