

perfluoroundecane

Inchi:	InChI=1S/C11F24/c12-1(13,2(14,15)4(18,19)6(22,23)8(26,27)10(30,31)32)3(16,17)5(20,
InchiKey:	VCIVYCHKSHULON-UHFFFAOYSA-N
Formula:	C11F24
SMILES:	FC(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)C(F)(F)
Mol. weight [g/mol]:	588.08
CAS:	307-49-3

Physical Properties

Property code	Value	Unit	Source
af	0.6583		Cheméo Relay (1.0)
gf	-4602.46	kJ/mol	Joback Method
hf	-5020.18	kJ/mol	Cheméo Relay (1.0)
hfus	16.61	kJ/mol	Joback Method
hvap	55.17	kJ/mol	Cheméo Relay (1.0)
ie	11.91	eV	Cheméo Relay (1.0)
logp	7.829		Crippen Method
mcvol	208.330	ml/mol	McGowan Method
pc	1011.02	kPa	Joback Method
tb	431.81	K	Cheméo Relay (1.0)
tc	543.66	K	Cheméo Relay (1.0)
tf	313.84	K	Cheméo Relay (1.0)
vc	0.970	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	563.95	J/mol×K	398.03	Joback Method
cpg	579.38	J/mol×K	414.98	Joback Method
cpg	593.91	J/mol×K	431.92	Joback Method
cpg	607.58	J/mol×K	448.87	Joback Method
cpg	620.41	J/mol×K	465.81	Joback Method
cpg	632.45	J/mol×K	482.76	Joback Method
cpg	643.71	J/mol×K	499.71	Joback Method

Sources

Cheméo Relay (1.0):

Cheméo Relay (1.0, beta):

NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C307493&Units=SI>

Joback Method: https://en.wikipedia.org/wiki/Joback_method

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

af:	Acentric Factor
cpg:	Ideal gas heat capacity
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
ie:	Ionization energy
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

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