

10-Undecenoyl chloride

Other names:	Undecylenoyl chloride 10-Undecylenoyl chloride «omega»-Undecylenic acid chloride undec-10-enoyl chloride
Inchi:	InChI=1S/C11H19ClO/c1-2-3-4-5-6-7-8-9-10-11(12)13/h2H,1,3-10H2
InchiKey:	MZFGYVZYLMNXGL-UHFFFAOYSA-N
Formula:	C11H19ClO
SMILES:	C=CCCCCCCCC(=O)Cl
Mol. weight [g/mol]:	202.72
CAS:	38460-95-6

Physical Properties

Property code	Value	Unit	Source
gf	-11.27	kJ/mol	Joback Method
hf	-273.26	kJ/mol	Joback Method
hfus	28.76	kJ/mol	Joback Method
hvap	50.54	kJ/mol	Joback Method
log10ws	-4.21		Crippen Method
logp	4.059		Crippen Method
mcvol	175.360	ml/mol	McGowan Method
pc	2054.89	kPa	Joback Method
tb	539.06	K	Joback Method
tc	718.81	K	Joback Method
tf	291.82	K	Joback Method
vc	0.688	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	400.66	J/mol×K	539.06	Joback Method
cpg	414.73	J/mol×K	569.02	Joback Method
cpg	428.15	J/mol×K	598.98	Joback Method
cpg	440.94	J/mol×K	628.94	Joback Method
cpg	453.12	J/mol×K	658.89	Joback Method

cpg	464.71	J/molxK	688.85	Joback Method
cpg	475.73	J/molxK	718.81	Joback Method
dvisc	0.0036735	Paxs	291.82	Joback Method
dvisc	0.0017877	Paxs	333.03	Joback Method
dvisc	0.0010195	Paxs	374.23	Joback Method
dvisc	0.0006500	Paxs	415.44	Joback Method
dvisc	0.0004494	Paxs	456.65	Joback Method
dvisc	0.0003303	Paxs	497.85	Joback Method
dvisc	0.0002545	Paxs	539.06	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	394.20	K	1.30	NIST Webbook

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C38460956&Units=SI

Legend

cpg:	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:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure

tb:	Normal Boiling Point Temperature
tbrp:	Boiling point at reduced pressure
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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