

5-Norbornene-2-carbonyl chloride

Other names:	Bicyclo[2.2.1]hept-5-ene-2-carbonyl chloride Bicyclo[2.2.1]-5-heptene-2-carbonyl chloride
Inchi:	InChI=1S/C8H9ClO/c9-8(10)7-4-5-1-2-6(7)3-5/h1-2,5-7H,3-4H2
InchiKey:	HXYXVFUUHSZSNV-UHFFFAOYSA-N
Formula:	C8H9ClO
SMILES:	O=C(Cl)C1CC2C=CC1C2
Mol. weight [g/mol]:	156.61
CAS:	27063-48-5

Physical Properties

Property code	Value	Unit	Source
gf	7.28	kJ/mol	Joback Method
hf	-159.89	kJ/mol	Joback Method
hfus	18.74	kJ/mol	Joback Method
hvap	44.51	kJ/mol	Joback Method
log10ws	-2.02		Crippen Method
logp	1.964		Crippen Method
mvol	111.370	ml/mol	McGowan Method
pc	3577.07	kPa	Joback Method
tb	485.98	K	Joback Method
tc	707.92	K	Joback Method
tf	288.65	K	Joback Method
vc	0.429	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	238.49	J/mol×K	485.98	Joback Method
cpg	252.60	J/mol×K	522.97	Joback Method
cpg	265.67	J/mol×K	559.96	Joback Method
cpg	277.76	J/mol×K	596.95	Joback Method
cpg	288.96	J/mol×K	633.94	Joback Method
cpg	299.32	J/mol×K	670.93	Joback Method
cpg	308.92	J/mol×K	707.92	Joback Method

dvisc	0.0015766	Paxs	288.65	Joback Method
dvisc	0.0014079	Paxs	321.54	Joback Method
dvisc	0.0012839	Paxs	354.43	Joback Method
dvisc	0.0011893	Paxs	387.31	Joback Method
dvisc	0.0011149	Paxs	420.20	Joback Method
dvisc	0.0010551	Paxs	453.09	Joback Method
dvisc	0.0010059	Paxs	485.98	Joback Method

Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	358.50 ± 1.50	K	2.00	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=C27063485&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
mccvol:	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

Latest version available from:

<https://www.cheméo.com/cid/47-926-2/5-Norbornene-2-carbonyl-chloride.pdf>

Generated by Cheméo on 2024-05-01 03:48:40.877798458 +0000 UTC m=+16824569.798375771.

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