

# 1-Propyne, 3-bromo-

<b>Other names:</b>	Propyne, 3-bromo- Propargyl bromide 1-Bromo-2-propyne 2-Propynyl bromide 3-Bromo-1-propyne 3-Bromopropyne «gamma»-Bromoallylene 1-Brom-2-propin UN 2345 Progargyl bromide NSC 8801
<b>Inchi:</b>	InChI=1S/C3H3Br/c1-2-3-4/h1H,3H2
<b>InchiKey:</b>	YORCIIVHUBAYBQ-UHFFFAOYSA-N
<b>Formula:</b>	C3H3Br
<b>SMILES:</b>	C#CCBr
<b>Mol. weight [g/mol]:</b>	118.96
<b>CAS:</b>	106-96-7

## Physical Properties

Property code	Value	Unit	Source
gf	211.77	kJ/mol	Joback Method
hf	212.98	kJ/mol	Joback Method
hfus	11.79	kJ/mol	Joback Method
hvap	28.56	kJ/mol	Joback Method
ie	10.47	eV	NIST Webbook
ie	10.48	eV	NIST Webbook
ie	10.43	eV	NIST Webbook
log10ws	-1.30		Crippen Method
logp	1.014		Crippen Method
mcvol	62.030	ml/mol	McGowan Method
pc	6018.58	kPa	Joback Method
tb	362.20	K	NIST Webbook
tb	362.00 ± 1.00	K	NIST Webbook
tc	524.58	K	Joback Method
tf	230.34	K	Joback Method
vc	0.228	m3/kmol	Joback Method

# Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	78.61	J/mol×K	324.32	Joback Method
cpg	82.58	J/mol×K	357.70	Joback Method
cpg	86.28	J/mol×K	391.07	Joback Method
cpg	89.71	J/mol×K	424.45	Joback Method
cpg	92.91	J/mol×K	457.83	Joback Method
cpg	95.88	J/mol×K	491.20	Joback Method
cpg	98.64	J/mol×K	524.58	Joback Method

# Pressure Dependent Properties

Property code	Value	Unit	Pressure [kPa]	Source
tbrp	306.20	K	17.30	NIST Webbook

## Sources

McGowan Method:	<a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>
NIST Webbook:	<a href="http://webbook.nist.gov/cgi/cbook.cgi?ID=C106967&amp;Units=SI">http://webbook.nist.gov/cgi/cbook.cgi?ID=C106967&amp;Units=SI</a>
Crippen Method:	<a href="http://pubs.acs.org/doi/abs/10.1021/ci9903071">http://pubs.acs.org/doi/abs/10.1021/ci9903071</a>
Crippen Method:	<a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a>
Joback Method:	<a href="https://en.wikipedia.org/wiki/Joback_method">https://en.wikipedia.org/wiki/Joback_method</a>

## Legend

<b>cpg:</b>	Ideal gas heat capacity
<b>gf:</b>	Standard Gibbs free energy of formation
<b>hf:</b>	Enthalpy of formation at standard conditions
<b>hfus:</b>	Enthalpy of fusion at standard conditions
<b>hvap:</b>	Enthalpy of vaporization at standard conditions

<b>ie:</b>	Ionization energy
<b>log10ws:</b>	Log10 of Water solubility in mol/l
<b>logp:</b>	Octanol/Water partition coefficient
<b>mcvol:</b>	McGowan's characteristic volume
<b>pc:</b>	Critical Pressure
<b>tb:</b>	Normal Boiling Point Temperature
<b>tbrp:</b>	Boiling point at reduced pressure
<b>tc:</b>	Critical Temperature
<b>tf:</b>	Normal melting (fusion) point
<b>vc:</b>	Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/56-438-4/1-Propyne-3-bromo.pdf>

Generated by Cheméo on 2024-04-27 02:51:17.536598644 +0000 UTC m=+16475526.457175957.

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