

Tetra-N-butylammonium bromide

Other names:	1-Butanaminium, N,N,N-tributyl-, bromide N,N,N-tributyl-1-butanaminium bromide N-butyl-N,N-bis(1-methylpropyl)-1-butanaminium bromide TBAB di-n-butyl-di-sec-butylammonium bromide tetrabutylammonium bromide
Inchi:	InChI=1S/C16H36N.BrH/c1-5-9-13-17(14-10-6-2,15-11-7-3)16-12-8-4;/h5-16H2,1-4H3;1H
InchiKey:	JRMUNVKIHCOMHV-UHFFFAOYSA-M
Formula:	C16H36BrN
SMILES:	CCCC[N+](CCCC)(CCCC)CCCC.[Br-]
Mol. weight [g/mol]:	322.37
CAS:	1643-19-2

Physical Properties

Property code	Value	Unit	Source
hf	-540.30 ± 3.20	kJ/mol	NIST Webbook
tf	395.00 ± 1.00	K	NIST Webbook
tf	395.00 ± 0.50	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	447.80	J/molxK	298.00	NIST Webbook
cps	412.00	J/molxK	298.15	NIST Webbook
hfust	16.15	kJ/mol	395.00	NIST Webbook
sfust	40.89	J/molxK	395.00	NIST Webbook

Sources

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Electrical Conductances of
Tetrabutylammonium Bromide, Sodium
Surfactant and Micellar Properties of Ionic
Liquids in Binary and Ternary Systems
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Tetrabutylammonium Bromide Ionic
Liquids in Aqueous and Alcohol Binary
Systems:

<https://www.doi.org/10.1021/je801001h>
<https://www.doi.org/10.1021/je5010005>
<https://www.doi.org/10.1021/acs.jced.8b00015>
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Legend

cps: Solid phase heat capacity
hf: Enthalpy of formation at standard conditions
hfust: Enthalpy of fusion at a given temperature
sfust: Entropy of fusion at a given temperature
tf: Normal melting (fusion) point

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