Tetramethylammonium chloride

Other names:	Ammonium, tetramethyl-, chloride
	Methanaminium, N,N,N-trimethyl-, chloride
	TMAC
	USAF AN-8
Inchi:	InChI=1S/C4H12N.ClH/c1-5(2,3)4;/h1-4H3;1H/q+1;/p-1
InchiKey:	OKIZCWYLBDKLSU-UHFFFAOYSA-M
Formula:	C4H12ClN
SMILES:	C[N+](C)(C)C.[Cl-]
Mol. weight [g/mol]:	109.60
CAS:	75-57-0

Physical Properties

Property code	Value	Unit	Source
ss	190.71	J/mol×K	NIST Webbook
tf	612.87	K	Measurement and PC-SAFT modeling of solid-liquid equilibrium of deep eutectic solvents of quaternary ammonium chlorides and carboxylic acids
tf	614.70	K	Can cholinium chloride form eutectic solvents with organic chloride-based salts?

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	156.94	J/mol×K	298.15	NIST Webbook

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C75570&Units=SI

Glycerol-Based Deep Eutectic Solvents as Extractants for the Separation of https://www.doi.org/10.1021/acs.jced.5b00717

https://www.doi.org/10.1016/j.fluid.2016.08.020

https://www.doi.org/10.1016/j.jct.2016.09.021

https://www.doi.org/10.1016/j.jct.2014.05.006

https://www.doi.org/10.1021/acs.jced.7b00523

https://www.doi.org/10.1016/j.fluid.2017.11.030

https://www.doi.org/10.1016/j.fluid.2018.01.019

https://www.doi.org/10.1016/j.fluid.2017.04.007

https://www.doi.org/10.1016/j.jct.2018.03.032

https://www.doi.org/10.1021/je0502039

https://www.doi.org/10.1016/j.fluid.2019.04.019

https://www.doi.org/10.1021/je5010005

https://www.doi.org/10.1016/j.fluid.2018.06.003

https://www.doi.org/10.1021/je400821q

https://www.doi.org/10.1016/j.jct.2014.03.001

https://www.doi.org/10.1016/j.fluid.2016.08.013

https://www.doi.org/10.1021/acs.jced.7b00690

Legend

cps: Solid phase heat capacity

ss: Solid phase molar entropy at standard conditions

tf: Normal melting (fusion) point