Potassium butyrate

Other names:	butanoic acid, potassium salt
	butyric acid, potassium salt
	potassium butanoate
	potassium n-butyrate
Inchi:	InChI=1S/C4H8O2.K/c1-2-3-4(5)6;/h2-3H2,1H3,(H,5,6);/q;+1/p-1
InchiKey:	RWMKSKOZLCXHOK-UHFFFAOYSA-M
Formula:	C4H7KO2
SMILES:	CCCC(=O)[O-].[K+]
Mol. weight [g/mol]:	126.20

Physical Properties

Property code	Value	Unit	Source
af	0.1627		Cheméo Relay (1.0)
gf	-185.94	kJ/mol	Cheméo Relay (1.0, beta)
hf	-567.63	kJ/mol	Cheméo Relay (1.0)
hvap	41.20	kJ/mol	Cheméo Relay (1.0)
ie	7.34	eV	Cheméo Relay (1.0)
log10ws	-0.66		Cheméo Relay (1.0)
pc	2796.31	kPa	Cheméo Relay (1.0, beta)
ss	211.52	J/mol×K	NIST Webbook
tb	588.89	K	Cheméo Relay (1.0)
tc	883.94	K	Cheméo Relay (1.0)
tf	667.00	K	Thermal Behavior of Potassium C1-C12 n-Alkanoates and Its Relevance to Fischer Tropsch
vc	0.237	m3/kmol	Cheméo Relay (1.0)

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	157.97	J/mol×K	298.15	NIST Webbook

Sources

Cheméo Relay (1.0):	
Cheméo Relay (1.0, beta):	
Thermal Behavior of Potassium C1-C12 n-Alkanoates and Its Relevance to Fischer−Tropsch:	https://www.doi.org/10.1021/je400874d
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C589399&Units=SI

Legend

af:	Acentric Factor
cps:	Solid phase heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
pc:	Critical Pressure
ss:	Solid phase molar entropy at standard conditions
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume