

sodium benzoate

Other names:	benzoic acid, sodium salt
Inchi:	InChI=1S/C7H6O2.Na/c8-7(9)6-4-2-1-3-5-6;/h1-5H,(H,8,9);/q;+1/p-1
InchiKey:	WXMKPNITSTVMEF-UHFFFAOYSA-M
Formula:	C7H5NaO2
SMILES:	O=C(O[Na])c1ccccc1
Mol. weight [g/mol]:	144.10
CAS:	532-32-1

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cps	74.66	J/mol×K	78.86	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	75.06	J/mol×K	80.43	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	76.58	J/mol×K	82.62	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	77.94	J/mol×K	84.79	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	79.00	J/mol×K	87.06	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

cps	80.34	J/mol×K	89.08	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	81.60	J/mol×K	91.16	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	82.94	J/mol×K	93.24	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	83.73	J/mol×K	95.32	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	84.83	J/mol×K	97.26	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	86.09	J/mol×K	99.20	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	87.27	J/mol×K	101.14	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	88.20	J/mol×K	103.01	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	89.11	J/mol×K	104.89	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

cps	89.81	J/mol×K	106.30	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	90.52	J/mol×K	107.72	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	91.63	J/mol×K	109.44	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	92.54	J/mol×K	111.32	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	93.55	J/mol×K	113.05	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	94.67	J/mol×K	114.93	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	95.37	J/mol×K	116.50	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	95.98	J/mol×K	118.38	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	97.43	J/mol×K	120.05	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	98.90	J/mol×K	122.61	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	100.57	J/mol×K	126.31	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	102.54	J/mol×K	129.87	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	104.11	J/mol×K	133.42	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	105.58	J/mol×K	137.05	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	107.64	J/mol×K	140.25	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	109.31	J/mol×K	143.52	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	111.38	J/mol×K	146.93	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	112.85	J/mol×K	150.20	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	114.42	J/mol×K	153.61	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	115.80	J/mol×K	156.74	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	117.10	J/mol×K	159.94	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	118.62	J/mol×K	163.08	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	120.71	J/mol×K	166.41	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	122.29	J/mol×K	169.54	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	124.15	J/mol×K	172.67	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	125.53	J/mol×K	175.80	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	127.20	J/mol×K	178.78	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	128.48	J/mol×K	182.05	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	130.74	J/mol×K	186.18	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	133.09	J/mol×K	190.73	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	134.96	J/mol×K	194.71	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	136.73	J/mol×K	198.69	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	138.89	J/mol×K	202.67	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	140.95	J/mol×K	206.65	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

cps	143.02	J/mol×K	210.78	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	144.69	J/mol×K	214.62	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	147.24	J/mol×K	218.60	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	148.91	J/mol×K	222.72	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	150.78	J/mol×K	226.56	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	152.55	J/mol×K	230.54	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	154.30	J/mol×K	234.67	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	156.48	J/mol×K	238.65	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	158.35	J/mol×K	242.63	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	160.90	J/mol×K	247.75	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	162.99	J/mol×K	252.79	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	164.60	J/mol×K	256.71	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	166.70	J/mol×K	260.69	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	168.34	J/mol×K	264.71	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	170.63	J/mol×K	268.80	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	172.89	J/mol×K	272.92	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	174.76	J/mol×K	276.90	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	176.43	J/mol×K	280.74	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	178.39	J/mol×K	284.72	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	179.87	J/mol×K	288.70	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	181.54	J/mol×K	292.69	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	182.91	J/mol×K	295.10	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	184.58	J/mol×K	298.37	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	185.56	J/mol×K	301.36	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	186.94	J/mol×K	304.35	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

cps	188.32	J/mol×K	307.33	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	189.49	J/mol×K	310.32	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	190.87	J/mol×K	313.30	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	191.75	J/mol×K	316.29	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	192.93	J/mol×K	319.28	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	194.21	J/mol×K	322.12	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	195.49	J/mol×K	325.11	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	196.77	J/mol×K	327.81	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	197.36	J/mol×K	329.51	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

cps	198.63	J/mol×K	332.93	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	199.91	J/mol×K	335.35	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	200.79	J/mol×K	338.05	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	202.17	J/mol×K	340.89	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	202.96	J/mol×K	343.88	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	204.33	J/mol×K	346.72	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	205.02	J/mol×K	349.42	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	206.20	J/mol×K	352.27	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	207.28	J/mol×K	355.25	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	208.56	J/mol×K	358.10	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	209.38	J/mol×K	360.85	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	210.82	J/mol×K	363.79	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	212.19	J/mol×K	366.63	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	213.57	J/mol×K	369.62	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	214.53	J/mol×K	372.46	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	215.93	J/mol×K	375.30	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)
cps	217.20	J/mol×K	378.15	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C ₆ H ₅ COONa (s)

cps	218.09	J/mol×K	380.99	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	219.66	J/mol×K	383.98	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	220.45	J/mol×K	386.68	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	221.82	J/mol×K	389.52	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	223.20	J/mol×K	392.37	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	224.18	J/mol×K	395.21	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)
cps	225.75	J/mol×K	397.91	Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C6H5COONa (s)

Sources

Density and Viscosity Study of Interactions of Some Amino Acids in Aqueous Sodium Benzoate Concentration Enhancement of Benzyl Acetate in Water on the Solubility and Mass Transfer Coefficient of Benzyl Benzoate in Water:

<https://www.doi.org/10.1021/acs.jced.5b01031>

<https://www.doi.org/10.1021/je0342872>

<https://www.doi.org/10.1021/je049756u>

Mixing Behavior of Anionic Hydrotropes with Cationic Gemini Surfactants of Benzoic, m-Salicylic, and p-Salicylic Acid: A Conductivity Study of Diluted Aqueous Solutions: Coefficient Enhancement of Stearic Acid Hydrotropy:

Low temperature heat capacities and standard molar enthalpy of formation of sodium benzoate C₆H₅COONa (s):

<https://www.doi.org/10.1021/je100256w>
<https://www.doi.org/10.1021/je200836x>
<https://www.doi.org/10.1021/je901041n>
<http://webbook.nist.gov/cgi/cbook.cgi?ID=C532321&Units=SI>
<https://www.doi.org/10.1016/j.tca.2008.12.029>

Legend

cps: Solid phase heat capacity

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