Aniline hydrochloride

Other names:	Benzenamine, hydrochloride
	anilinium chloride
Inchi:	InChI=1S/C6H7N.ClH/c7-6-4-2-1-3-5-6;/h1-5H,7H2;1H
InchiKey:	MMCPOSDMTGQNKG-UHFFFAOYSA-N
Formula:	C6H7N.ClH
SMILES:	Cl.Nc1ccccc1
Mol. weight [g/mol]:	129.59
CAS:	142-04-1

Physical Properties

Property code	Value	Unit	Source
tb	518.20	K	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hsubt	87.50	kJ/mol	427.00	NIST Webbook
pvap	62.25	kPa	505.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	31.25	kPa	484.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system

pvap	34.25	kPa	488.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	41.25	kPa	493.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	44.25	kPa	494.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	45.25	kPa	495.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	46.25	kPa	496.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	49.25	kPa	498.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	

pvap	51.25	kPa	499.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	52.75	kPa	500.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	54.75	kPa	501.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	56.25	kPa	502.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	59.00	kPa	503.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	27.25	kPa	480.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system

pvap	71.25	kPa	509.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	79.25	kPa	512.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	83.75	kPa	513.65	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	91.25	kPa	516.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	97.25	kPa	517.65	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	101.50	kPa	519.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	

pvap	105.25	kPa	519.65	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	112.25	kPa	521.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	118.25	kPa	522.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	131.25	kPa	524.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	136.25	kPa	525.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	
pvap	141.25	kPa	526.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system	

pvap	148.25	kPa	527.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system
pvap	23.25	kPa	475.15	Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C142041&Units=SI
Determination of saturated vapour pressure of aniline hydrochloride and vapour-liquid equilibrium of the water- aniline hydrochloride system:	https://www.doi.org/10.1016/j.fluid.2015.12.053
Experimental Measurement and Modeling of Aniline Hydrochloride Solubility in Water, Methanol, Ethanol, 1- Propanol and Their Mixed Systems:	https://www.doi.org/10.1021/je201047m

Legend

hsubt:	Enthalpy of sublimation at a given temperature
pvap:	Vapor pressure
tb:	Normal Boiling Point Temperature