

3-Octanol

Other names:	Amylethylcarbinol D-n-Octanol Ethyl-n-amylcarbinol Ethylamylcarbinol Octan-3-ol Octanol-3 n-Octan-3-ol
Inchi:	InChI=1S/C8H18O/c1-3-5-6-7-8(9)4-2/h8-9H,3-7H2,1-2H3
InchiKey:	NMRPBPVERJPACX-UHFFFAOYSA-N
Formula:	C8H18O
SMILES:	CCCCC(O)CC
Mol. weight [g/mol]:	130.23
CAS:	589-98-0

Physical Properties

Property code	Value	Unit	Source
cpl	339.89	J/mol×K	Vapour pressures and heat capacity measurements on the C7 C9 secondary aliphatic alcohols
gf	-122.78	kJ/mol	Joback Method
hf	-365.96	kJ/mol	Joback Method
hfus	17.04	kJ/mol	Joback Method
hvap	49.69	kJ/mol	Joback Method
log10ws	-1.98		Aqueous Solubility Prediction Method
log10ws	-1.98		Estimated Solubility Method
logp	2.338		Crippen Method
mcvol	129.450	ml/mol	McGowan Method
pc	2811.36	kPa	Joback Method
rhoc	252.64 ± 6.51	kg/m3	NIST Webbook
rhoc	252.64	kg/m3	NIST Webbook
rinpol	995.00		NIST Webbook
rinpol	977.00		NIST Webbook
rinpol	986.00		NIST Webbook
rinpol	1002.00		NIST Webbook
rinpol	995.00		NIST Webbook

rinpol	982.00	NIST Webbook
rinpol	979.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	989.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	985.40	NIST Webbook
rinpol	980.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	998.00	NIST Webbook
rinpol	999.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	1007.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	971.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	979.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	987.00	NIST Webbook
rinpol	987.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	961.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	989.00	NIST Webbook
rinpol	1013.00	NIST Webbook
rinpol	1012.00	NIST Webbook
rinpol	1012.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	981.00	NIST Webbook

rinpol	981.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	1004.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	974.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	984.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	983.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	980.00	NIST Webbook
rinpol	999.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	984.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	987.00	NIST Webbook
rinpol	971.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	992.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	989.00	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	979.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	995.00	NIST Webbook

rinpol	991.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	977.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	999.00	NIST Webbook
rinpol	992.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	1004.00	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	1002.00	NIST Webbook
rinpol	998.00	NIST Webbook
rinpol	992.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	1002.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	978.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	963.00	NIST Webbook
rinpol	998.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	1002.00	NIST Webbook
rinpol	1001.00	NIST Webbook
rinpol	998.00	NIST Webbook
rinpol	984.00	NIST Webbook
rinpol	980.00	NIST Webbook
rinpol	983.00	NIST Webbook
rinpol	997.00	NIST Webbook
rinpol	985.40	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	992.00	NIST Webbook

rinpol	994.00	NIST Webbook
rinpol	1013.00	NIST Webbook
rinpol	980.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	997.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	1007.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	1007.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	989.00	NIST Webbook
rinpol	995.90	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	999.00	NIST Webbook
rinpol	991.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	988.00	NIST Webbook
rinpol	997.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	997.00	NIST Webbook
rinpol	1004.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	996.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	997.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	981.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	977.00	NIST Webbook
rinpol	994.00	NIST Webbook

rinpol	982.00	NIST Webbook
rinpol	985.00	NIST Webbook
rinpol	979.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	978.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	982.00	NIST Webbook
rinpol	990.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	971.00	NIST Webbook
rinpol	980.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	1002.00	NIST Webbook
rinpol	993.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	1000.00	NIST Webbook
rinpol	994.00	NIST Webbook
rinpol	986.00	NIST Webbook
rinpol	995.00	NIST Webbook
rinpol	993.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1411.00	NIST Webbook
ripol	1356.00	NIST Webbook
ripol	1390.00	NIST Webbook
ripol	1388.00	NIST Webbook
ripol	1391.00	NIST Webbook
ripol	1368.00	NIST Webbook
ripol	1401.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1383.00	NIST Webbook
ripol	1399.00	NIST Webbook
ripol	1417.80	NIST Webbook
ripol	1386.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1404.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1387.00	NIST Webbook
ripol	1392.00	NIST Webbook
ripol	1394.00	NIST Webbook
ripol	1396.00	NIST Webbook
ripol	1394.00	NIST Webbook

ripol	1379.00	NIST Webbook
ripol	1401.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1379.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1356.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1383.00	NIST Webbook
ripol	1394.00	NIST Webbook
ripol	1403.00	NIST Webbook
ripol	1394.00	NIST Webbook
ripol	1399.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1399.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1411.00	NIST Webbook
ripol	1406.00	NIST Webbook
ripol	1399.00	NIST Webbook
ripol	1390.00	NIST Webbook
ripol	1400.00	NIST Webbook
ripol	1396.00	NIST Webbook
ripol	1405.00	NIST Webbook
ripol	1390.00	NIST Webbook
ripol	1388.00	NIST Webbook
ripol	1382.00	NIST Webbook
ripol	1389.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1380.00	NIST Webbook
ripol	1397.00	NIST Webbook
ripol	1379.00	NIST Webbook
ripol	1391.00	NIST Webbook
ripol	1364.00	NIST Webbook

ripol	1395.00	NIST Webbook
ripol	1386.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1411.00	NIST Webbook
ripol	1357.00	NIST Webbook
ripol	1383.00	NIST Webbook
ripol	1375.00	NIST Webbook
ripol	1391.00	NIST Webbook
ripol	1393.00	NIST Webbook
ripol	1383.00	NIST Webbook
ripol	1380.00	NIST Webbook
ripol	1384.00	NIST Webbook
ripol	1408.00	NIST Webbook
ripol	1368.00	NIST Webbook
ripol	1386.00	NIST Webbook
ripol	1417.80	NIST Webbook
ripol	1417.80	NIST Webbook
ripol	1359.00	NIST Webbook
ripol	1385.00	NIST Webbook
ripol	1392.00	NIST Webbook
ripol	1396.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1380.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1385.00	NIST Webbook
ripol	1386.00	NIST Webbook
ripol	1400.00	NIST Webbook
ripol	1368.00	NIST Webbook
ripol	1404.00	NIST Webbook
ripol	1406.00	NIST Webbook
ripol	1406.00	NIST Webbook
ripol	1406.00	NIST Webbook
ripol	1400.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1397.00	NIST Webbook
ripol	1381.00	NIST Webbook
ripol	1380.00	NIST Webbook
ripol	1398.00	NIST Webbook
ripol	1387.00	NIST Webbook
ripol	1384.00	NIST Webbook
ripol	1427.00	NIST Webbook
ripol	1383.00	NIST Webbook
ripol	1395.00	NIST Webbook
ripol	1392.00	NIST Webbook

ripol	1395.00		NIST Webbook
ripol	1389.00		NIST Webbook
ripol	1383.00		NIST Webbook
ripol	1423.00		NIST Webbook
ripol	1394.00		NIST Webbook
ripol	1400.00		NIST Webbook
ripol	1396.00		NIST Webbook
ripol	1394.00		NIST Webbook
ripol	1394.00		NIST Webbook
ripol	1396.00		NIST Webbook
ripol	1398.00		NIST Webbook
ripol	1398.00		NIST Webbook
ripol	1390.00		NIST Webbook
ripol	1390.00		NIST Webbook
ripol	1383.00		NIST Webbook
ripol	1400.00		NIST Webbook
ripol	1383.00		NIST Webbook
ripol	1395.00		NIST Webbook
tb	474.18	K	Joback Method
tc	628.45 ± 0.30	K	NIST Webbook
tc	628.50	K	NIST Webbook
tc	628.50 ± 0.50	K	NIST Webbook
tf	235.40	K	Aqueous Solubility Prediction Method
vc	0.515	m3/kmol	NIST Webbook

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	290.23	J/mol×K	474.18	Joback Method
cpg	302.08	J/mol×K	501.33	Joback Method
cpg	313.47	J/mol×K	528.49	Joback Method
cpg	324.43	J/mol×K	555.64	Joback Method
cpg	334.96	J/mol×K	582.79	Joback Method
cpg	345.08	J/mol×K	609.94	Joback Method
cpg	354.79	J/mol×K	637.10	Joback Method
cpl	338.50	J/mol×K	298.50	NIST Webbook
dvisc	0.1178389	Pa×s	225.74	Joback Method
dvisc	0.0169844	Pa×s	267.15	Joback Method
dvisc	0.0041171	Pa×s	308.55	Joback Method
dvisc	0.0013956	Pa×s	349.96	Joback Method

dvisc	0.0005948	Pa×s	391.37	Joback Method
dvisc	0.0002984	Pa×s	432.77	Joback Method
dvisc	0.0001689	Pa×s	474.18	Joback Method

Correlations

Information	Value
Property code	pvap
Equation	$\ln(P_{vp}) = A + B/(T + C)$
Coeff. A	1.68983e+01
Coeff. B	-4.80013e+03
Coeff. C	-5.32220e+01
Temperature range (K), min.	342.20
Temperature range (K), max.	467.50

Sources

McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C589980&Units=SI
The Yaws Handbook of Vapor Pressure:	https://www.sciencedirect.com/book/9780128029992/the-yaws-handbook-of-vapor-pressure
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Vapour pressures and heat capacity measurements on the C7 C9 secondary alkanes:	https://www.doi.org/10.1016/j.jct.2006.10.007
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
Aqueous Solubility Prediction Method:	http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDataset002.xlsx
Estimated Solubility Method:	http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt

Legend

cpg:	Ideal gas heat capacity
cpl:	Liquid phase heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions

log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
pvap:	Vapor pressure
rhoc:	Critical density
rinpol:	Non-polar retention indices
ripol:	Polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

Latest version available from:

<https://www.cheméo.com/cid/77-975-5/3-Octanol.pdf>

Generated by Cheméo on 2025-12-05 19:13:00.504001745 +0000 UTC m=+4710178.034042400.

Cheméo (<https://www.cheméo.com>) is the biggest free database of chemical and physical data for the process industry.