Ethylenediaminetetraacetic acid

Other names:

Edetic Acid
N,N'-1,2-Ethane diylbis-(N-(carboxymethyl)glycine)
Diaminoethanetetra-acetic acid
Glycine, N,N'-1,2-ethanediylbis[N-(carboxymethyl)-
Acetic acid, (ethylenedinitrilo)tetra-
Acide ethylenediaminetetracetique
Celon A
Celon ATH
Cheelox
Cheelox BF acid
Chemcolox 340
Complexon II
3,6-Diazaoctanedioic acid, 3,6-bis(carboxymethyl)-
Edathamil
Edta
Edta acid
Endrate
Ethylenediamine-N,N,N',N'-tetraacetic acid
Ethylenedinitrilotetraacetic acid
Hamp-ene acid
Havidote
Komplexon ii
Kyselina ethylendiamintetraoctova
Metaquest A
Nervanaid B acid
Nullapon B acid
Nullapon BF acid
Perma kleer 50 acid
Questex 4H
SEQ 100
Sequestrene AA
Sequestric acid
Sequestrol
Tetrine acid
Titriplex
Tricon bw
Trilon BW
Versene
Versene acid
Vinkeil 100

Warkeelate acid
(Ethylenedintrilo)tetraacetic acid
EDTA, free base
EDTA, free acid
Trilon BS
([2-(Bis-carboxymethyl-amino)-ethyl]-carboxymethyl-amino)-acetic acid
Titriplex II
YD 30
Quastal Special
Acetic acid, 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis-
Gluma Cleanser
EDTA (chelating agent)
Chelest 3A
ICRF 185

Inchi: InChI=1S/C10H16N2O8/c13-7(14)3-11(4-8(15)16)1-2-12(5-9(17)18)6-10(19)20/h1-6H2,(

InchiKey: KCXVZYZYPLLWCC-UHFFFAOYSA-N

Formula: C10H16N2O8

SMILES: O=C(O)CN(CCN(CC(=O)O)CC(=O)O)CC(=O)O

Mol. weight [g/mol]: 292.24

CAS: 60-00-4

Physical Properties

Property code	Value	Unit	Source
chs	-4458.10 ± 3.60	kJ/mol	NIST Webbook
chs	-4462.20 ± 0.80	kJ/mol	NIST Webbook
gf	-808.08	kJ/mol	Joback Method
hf	-1173.91	kJ/mol	Joback Method
hfs	-1759.00 ± 0.80	kJ/mol	NIST Webbook
hfs	-1761.70 ± 3.70	kJ/mol	NIST Webbook
hfus	50.45	kJ/mol	Joback Method
hvap	135.64	kJ/mol	Joback Method
log10ws	2.46		Crippen Method
logp	-2.071		Crippen Method
mcvol	201.480	ml/mol	McGowan Method
pc	4098.62	kPa	Joback Method
tb	1037.28	K	Joback Method
tc	1290.13	K	Joback Method
tf	710.40	K	Joback Method
vc	0.732	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	649.12	J/mol×K	1037.28	Joback Method
cpg	656.40	J/mol×K	1079.42	Joback Method
cpg	663.00	J/mol×K	1121.56	Joback Method
cpg	669.00	J/mol×K	1163.70	Joback Method
cpg	674.49	J/mol×K	1205.84	Joback Method
cpg	679.55	J/mol×K	1247.98	Joback Method
cpg	684.26	J/mol×K	1290.13	Joback Method

Sources

Crippen Method: http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method: https://en.wikipedia.org/wiki/Joback_method
McGowan Method: http://link.springer.com/article/10.1007/BF02311772
NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C60004&Units=SI

Legend

chs: Standard solid enthalpy of combustion
cpg: Ideal gas heat capacity
gf: Standard Gibbs free energy of formation
hf: Enthalpy of formation at standard conditions
hfs: Solid phase 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
tb: Normal Boiling Point Temperature
tc: Critical Temperature

tf: Normal melting (fusion) point

vc: Critical Volume