

Phenol, 2,2'-[1,2-ethanediylbis(nitrilomethylidyne)]bis-

Other names:

1,2-Bis(salicylideneamino)ethane
1,2-Ethanediamine, N,N'-bis[(2-hydroxyphenyl)methylene]-
2,2'-(ethane-1,2-diylbis(azanylylidene))bis(methanylylidene)diphenol
2,2'-[ethylenebis(nitrilomethylidyne)]diphenol
Bis(salicylaldehyde)ethylenediamine
Disalicylalethylenediamine
Disalicylidene-1,2-ethanediamicne
Ethylene bis(salicylimine)
Ethylenediamine, N,N'-disalicylidene-
N,N'-Bis(salicylidene)ethylenediamine
N,N'-Disalicylideneethylenediamine
N,N'-Ethylene diimino di(o-cresol)
N,N'-Ethylenebis(salicylideneimine)
N,N'-bis(2-hydroxybenzylidene)-1,2-ethanediamicne
NSC 2079
Salen
USAF DO-63
alpha,alpha'-(Ethylenedinitrilo)di-o-cresol
o-Cresol, «alpha», «alpha»'-(ethylenedinitrilo)di-
«alpha», «alpha»'-(Ethylenedinitrilo)di-o-cresol

Inchi: InChI=1S/C16H16N2O2/c19-15-7-3-1-5-13(15)11-17-9-10-18-12-14-6-2-4-8-16(14)20/h1

InchiKey: VEUMANXWQDHAJV-UHFFFAOYSA-N

Formula: C16H16N2O2

SMILES: Oc1ccccc1C=NCCN=Cc1ccccc1O

Mol. weight [g/mol]: 268.31

CAS: 94-93-9

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------------|--------|----------------|
| hf | -90.69 | kJ/mol | Joback Method |
| hsub | 141.30 ± 3.20 | kJ/mol | NIST Webbook |
| hvap | 88.42 | kJ/mol | Joback Method |
| ie | 8.53 ± 0.07 | eV | NIST Webbook |
| log10ws | -2.35 | | Crippen Method |
| logp | 2.636 | | Crippen Method |
| mcvol | 211.880 | ml/mol | McGowan Method |
| pc | 2490.03 | kPa | Joback Method |

| | | | |
|----|---------|---|---------------|
| tb | 933.44 | K | Joback Method |
| tc | 1199.86 | K | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|-------|--------|-----------------|--------------|
| hfust | 34.09 | kJ/mol | 397.90 | NIST Webbook |

Sources

Partial Molar Volumes of

N,N'-1,2-Ethyl-bis(salicyladimine) Schiff

Base(Salen): Organic Solvents at T =

(283.15 to 318.15) K:

McGowan Method:

<https://www.doi.org/10.1021/je100369a>

Joback Method: https://en.wikipedia.org/wiki/Joback_method

<http://link.springer.com/article/10.1007/BF02311772>

NIST Webbook:

<http://webbook.nist.gov/cgi/cbook.cgi?ID=C94939&Units=SI>

Crippen Method:

<http://pubs.acs.org/doi/abs/10.1021/ci990307l>

Crippen Method:

https://www.chemeo.com/doc/models/crippen_log10ws

Thermochemical study on the Schiff base[H2salen = N,N -bis(salicylidene) ethylendiamine] and its binuclear copper (II) complex:

<https://www.doi.org/10.1016/j.tca.2013.07.004>

Legend

| | |
|----------|---|
| hf: | Enthalpy of formation at standard conditions |
| hfust: | Enthalpy of fusion at a given temperature |
| hsub: | Enthalpy of sublimation at standard conditions |
| hvap: | Enthalpy of vaporization at standard conditions |
| ie: | Ionization energy |
| 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 |

Latest version available from:

<https://www.chemeo.com/cid/59-226-6/Phenol-2-2-1-2-ethanediylbis-nitrilomethylidyne-bis.pdf>

Generated by Cheméo on 2024-04-09 23:44:56.251604066 +0000 UTC m=+14995545.172181381.

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