

(Z)-1-(But-1-en-1-yl)-2-(sec-butyl)disulfane

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|----------------------|--|
| Inchi: | InChI=1S/C8H16S2/c1-4-6-7-9-10-8(3)5-2/h6-8H,4-5H2,1-3H3/b7-6- |
| InchiKey: | FRHITHLONVCSDB-SREVYHEPSA-N |
| Formula: | C8H16S2 |
| SMILES: | CCC=CSSC(C)CC |
| Mol. weight [g/mol]: | 176.34 |
| CAS: | 110690-21-6 |

Physical Properties

| Property code | Value | Unit | Source |
|---------------|---------|---------|----------------|
| gf | 160.50 | kJ/mol | Joback Method |
| hf | -12.77 | kJ/mol | Joback Method |
| hfus | 21.42 | kJ/mol | Joback Method |
| hvap | 46.61 | kJ/mol | Joback Method |
| log10ws | -4.39 | | Crippen Method |
| logp | 4.090 | | Crippen Method |
| mcvol | 151.980 | ml/mol | McGowan Method |
| pc | 2793.56 | kPa | Joback Method |
| rinpol | 1255.40 | | NIST Webbook |
| rinpol | 1255.40 | | NIST Webbook |
| tb | 523.72 | K | Joback Method |
| tc | 744.30 | K | Joback Method |
| tf | 228.64 | K | Joback Method |
| vc | 0.566 | m3/kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 322.91 | J/molxK | 523.72 | Joback Method |
| cpg | 337.33 | J/molxK | 560.48 | Joback Method |
| cpg | 350.96 | J/molxK | 597.25 | Joback Method |
| cpg | 363.82 | J/molxK | 634.01 | Joback Method |
| cpg | 375.95 | J/molxK | 670.77 | Joback Method |
| cpg | 387.36 | J/molxK | 707.54 | Joback Method |
| cpg | 398.07 | J/molxK | 744.30 | Joback Method |

Sources

| | |
|------------------------|---|
| McGowan Method: | http://link.springer.com/article/10.1007/BF02311772 |
| NIST Webbook: | http://webbook.nist.gov/cgi/cbook.cgi?ID=C110690216&Units=SI |
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci990307I |
| Crippen Method: | https://www.chemeo.com/doc/models/crippen_log10ws |
| Joback Method: | https://en.wikipedia.org/wiki/Joback_method |

Legend

| | |
|-----------------|---|
| cpg: | Ideal gas heat capacity |
| 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 |
| rinpola: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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