

2,5-Di(trifluoromethyl)benzoic acid, 2,4-dichloronaphth-1-yl ester

Inchi: InChI=1S/C19H8Cl2F6O2/c20-14-8-15(21)16(11-4-2-1-3-10(11)14)29-17(28)12-7-9(18(2
InchiKey: WKTSUNBLHUOBON-UHFFFAOYSA-N
Formula: C19H8Cl2F6O2
SMILES: O=C(Oc1c(Cl)cc(Cl)c2ccccc12)c1cc(C(F)(F)F)ccc1C(F)(F)F
Mol. weight [g/mol]: 453.16

Physical Properties

| Property code | Value | Unit | Source |
|---------------|----------|----------------------|----------------|
| gf | -1028.54 | kJ/mol | Joback Method |
| hf | -1299.15 | kJ/mol | Joback Method |
| hfus | 42.95 | kJ/mol | Joback Method |
| hvap | 77.82 | kJ/mol | Joback Method |
| log10ws | -8.94 | | Crippen Method |
| logp | 7.403 | | Crippen Method |
| mvol | 254.130 | ml/mol | McGowan Method |
| pc | 1639.10 | kPa | Joback Method |
| rinpol | 2347.00 | | NIST Webbook |
| rinpol | 2347.00 | | NIST Webbook |
| tb | 871.67 | K | Joback Method |
| tc | 1096.05 | K | Joback Method |
| tf | 592.41 | K | Joback Method |
| vc | 1.014 | m ³ /kmol | Joback Method |

Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---------------|--------|---------|-----------------|---------------|
| cpg | 696.41 | J/molxK | 871.67 | Joback Method |
| cpg | 705.84 | J/molxK | 909.07 | Joback Method |
| cpg | 714.54 | J/molxK | 946.46 | Joback Method |
| cpg | 722.62 | J/molxK | 983.86 | Joback Method |
| cpg | 730.19 | J/molxK | 1021.25 | Joback Method |
| cpg | 737.36 | J/molxK | 1058.65 | Joback Method |
| cpg | 744.25 | J/molxK | 1096.05 | Joback Method |

Sources

| | |
|------------------------|---|
| Crippen Method: | http://pubs.acs.org/doi/abs/10.1021/ci9903071 |
| Crippen Method: | https://www.cheméo.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=U357375&Units=SI |

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 |
| hvp: | 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 |
| rinp: | Non-polar retention indices |
| tb: | Normal Boiling Point Temperature |
| tc: | Critical Temperature |
| tf: | Normal melting (fusion) point |
| vc: | Critical Volume |

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