# Dichlofluanid

**Other names:** Methanesulfenamide, 1,1-dichloro-N-[(dimethylamino)sulfonyl]-1-fluoro-N-phenyl-
Sulfamide, N-[(dichlorofluoromethyl)thio]-N',N'-dimethyl-N-phenyl-
Bayer 47531
BAY 47531
Dichlofluanide
Elvaron
Eparen
Euparen
Oiparen
Pecudin
N'-Dichlorofluoromethylthio-NN-dimethyl-N'-phenylsulphamide
Aniline, N-((dichlorofluoromethyl)thio)-N-((dimethylamino)sulfonyl)-
Euparene
Ku 13-o32-c
KUE 13032c
N-(Dichlor-fluor-methyl-thio)-N',N'-dimethyl-N-phenyl-schwefel-saeurediamid
N-((Dichlorofluoromethyl)thio)-N',N'-dimethyl-N-phenylsulfamide
N,N-Dimethyl-N'-phenyl-N'-((fluorodichloromethyl)thio)sulfamide
1,1-Dichloro-N-((dimethylamino)sulfonyl)-1-fluoro-N-phenylmethanesulfenamide
Diclofluanide
NSC 218451

**Inchi:** InChI=1S/C9H11Cl2FN2O2S2/c1-13(2)18(15,16)14(17-9(10,11)12)8-6-4-3-5-7-8/h3-7H,1

**InchiKey:** WURGXGVFSMYFCG-UHFFFAOYSA-N

**Formula:** C9H11Cl2FN2O2S2

**SMILES:** CN(C)S(=O)(=O)N(SC(F)(Cl)Cl)c1ccccc1

**Mol. weight [g/mol]:** 333.23

**CAS:** 1085-98-9

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -292.38 | kJ/mol | Joback Method |
| hf | -505.32 | kJ/mol | Joback Method |
| hfus | 38.72 | kJ/mol | Joback Method |
| hvap | 74.10 | kJ/mol | Joback Method |
| log10ws | -3.81 | | Crippen Method |
| logp | 3.006 | | Crippen Method |

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|---|---|---|---|
| mcvol | 204.560 | ml/mol | McGowan Method |
| pc | 3530.46 | kPa | Joback Method |
| rinpol | 1947.00 | | NIST Webbook |
| rinpol | 1965.00 | | NIST Webbook |
| rinpol | 1921.00 | | NIST Webbook |
| rinpol | 1943.00 | | NIST Webbook |
| tb | 644.34 | K | Joback Method |
| tc | 868.70 | K | Joback Method |
| tf | 418.36 | K | Joback Method |
| vc | 0.752 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 480.08 | J/mol×K | 644.34 | Joback Method |
| cpg | 493.20 | J/mol×K | 681.73 | Joback Method |
| cpg | 505.11 | J/mol×K | 719.13 | Joback Method |
| cpg | 515.86 | J/mol×K | 756.52 | Joback Method |
| cpg | 525.53 | J/mol×K | 793.91 | Joback Method |
| cpg | 534.16 | J/mol×K | 831.31 | Joback Method |
| cpg | 541.84 | J/mol×K | 868.70 | Joback Method |

# Sources

**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C1085989&Units=SI
**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

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