# Carbromal

**Other names:**
(2-Bromo-2-ethylbutyryl)urea
(«alpha»-Bromo-«alpha»-ethylbutyryl)carbamide
(«alpha»-Bromo-«alpha»-ethylbutyryl)urea
(«alpha»-Ethyl-«alpha»-bromobutyryl)urea
(Â«alphaÂ»-Bromo-Â«alphaÂ»-ethylbutyryl)carbamide
(Â«alphaÂ»-Bromo-Â«alphaÂ»-ethylbutyryl)urea
(Â«alphaÂ»-Ethyl-Â«alphaÂ»-bromobutyryl)urea
1-Bromo-ethyl-butyryl-urea
2-Brom-2-ethylbutyrylmocovina
2-bromo-N-carbamoyl-2-ethylbutanamide
Adalin
Addisomnol
Adisomnol
Bromacetocarbamide
Bromadal
Bromadel
Bromdiethylacetylurea
Bromodiacetylurea
Bromodiethylacetylcarbamide
Bromodiethylacetylurea
Butanamide, N-(aminocarbonyl)-2-bromo-2-ethyl-
Diacid
Dormiturin
Fydalin
Hoggar
Karbromal
Kartryl
N-(Aminocarbonyl)-2-bromo-2-ethylbutanamide
NCI-C03805
NSC 49191
Nenesin
Nyctal
Parkosed
Pelidorm
Pianadalin
Planadalin
Tildin
Uradal
Urea, (2-bromo-2-ethylbutyryl)-

**Inchi:** InChI=1S/C7H13BrN2O2/c1-3-7(8,4-2)5(11)10-6(9)12/h3-4H2,1-2H3,(H3,9,10,11,12)

**InchiKey:** OPNPQXLQERQBBV-UHFFFAOYSA-N
**Formula:** C7H13BrN2O2
**SMILES:** CCC(Br)(CC)C(=O)NC(N)=O
**Mol. weight [g/mol]:** 237.09
**CAS:** 77-65-6

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -76.78 | kJ/mol | Joback Method |
| hf | -308.13 | kJ/mol | Joback Method |
| hfus | 25.25 | kJ/mol | Joback Method |
| hvap | 66.88 | kJ/mol | Joback Method |
| log10ws | -2.68 | | Aqueous Solubility Prediction Method |
| log10ws | -2.68 | | Estimated Solubility Method |
| logp | 1.135 | | Crippen Method |
| mcvol | 150.090 | ml/mol | McGowan Method |
| pc | 3877.12 | kPa | Joback Method |
| rinpol | 1515.00 | | NIST Webbook |
| rinpol | 1560.00 | | NIST Webbook |
| rinpol | 1515.00 | | NIST Webbook |
| rinpol | 1525.00 | | NIST Webbook |
| rinpol | 1500.00 | | NIST Webbook |
| rinpol | 1500.00 | | NIST Webbook |
| rinpol | 1515.00 | | NIST Webbook |
| rinpol | 1500.00 | | NIST Webbook |
| rinpol | 1515.00 | | NIST Webbook |
| rinpol | 1509.00 | | NIST Webbook |
| rinpol | 1513.00 | | NIST Webbook |
| rinpol | 1501.00 | | NIST Webbook |
| rinpol | 1501.00 | | NIST Webbook |
| rinpol | 1560.00 | | NIST Webbook |
| rinpol | 1513.00 | | NIST Webbook |
| rinpol | 1513.00 | | NIST Webbook |
| tb | 652.93 | K | Joback Method |
| tc | 875.62 | K | Joback Method |
| tf | 466.65 | K | Joback Method |
| vc | 0.554 | m3/kmol | Joback Method |

# Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 369.01 | J/mol×K | 652.93 | Joback Method |
| cpg | 379.44 | J/mol×K | 690.04 | Joback Method |
| cpg | 389.11 | J/mol×K | 727.16 | Joback Method |
| cpg | 398.06 | J/mol×K | 764.27 | Joback Method |
| cpg | 406.36 | J/mol×K | 801.39 | Joback Method |
| cpg | 414.05 | J/mol×K | 838.50 | Joback Method |
| cpg | 421.20 | J/mol×K | 875.62 | Joback Method |

# Sources

**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**Aqueous Solubility Prediction Method:** http://onschallenge.wikispaces.com/file/view/AqueousDataset002.xlsx/351826032/AqueousDa
**Estimated Solubility Method:** http://pubs.acs.org/doi/suppl/10.1021/ci034243x/suppl_file/ci034243xsi20040112_053635.txt
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C77656&Units=SI
**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l

# 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