

Benzene, 1-azido-4-nitro-

Other names:	1-Azido-4-nitrobenzen 1-azido-4-nitrobenzene 4-Nitrophenyl azide p-Azidonitrobenzene p-Nitrophenyl azide
Inchi:	InChI=1S/C6H4N4O2/c7-9-8-5-1-3-6(4-2-5)10(11)12/h1-4H
InchiKey:	CZZVSJPFJBUBDK-UHFFFAOYSA-N
Formula:	C6H4N4O2
SMILES:	[N-]=[N+]=Nc1ccc([N+](=O)[O-])cc1
Mol. weight [g/mol]:	164.12
CAS:	1516-60-5

Physical Properties

Property code	Value	Unit	Source
chs	-3241.40 ± 4.20	kJ/mol	NIST Webbook
hf	389.70 ± 5.20	kJ/mol	NIST Webbook
hfs	308.70 ± 4.30	kJ/mol	NIST Webbook
hsub	81.00 ± 3.00	kJ/mol	NIST Webbook
log10ws	-7.78		Crippen Method
logp	2.537		Crippen Method
mvol	110.400	ml/mol	McGowan Method
tf	341.40	K	Thermochemistry of organic azides revisited

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
hfust	17.10	kJ/mol	345.40	NIST Webbook

Sources

Crippen Method: <http://pubs.acs.org/doi/abs/10.1021/ci990307l>
Crippen Method: https://www.chemeo.com/doc/models/crippen_log10ws
Thermochemistry of organic azides revisited: <https://www.doi.org/10.1016/j.tca.2014.10.015>
McGowan Method: <http://link.springer.com/article/10.1007/BF02311772>
NIST Webbook: <http://webbook.nist.gov/cgi/cbook.cgi?ID=C1516605&Units=SI>

Legend

chs: Standard solid enthalpy of combustion
hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation at standard conditions
hfust: Enthalpy of fusion at a given temperature
hsub: Enthalpy of sublimation at standard conditions
log10ws: Log10 of Water solubility in mol/l
logp: Octanol/Water partition coefficient
mcvol: McGowan's characteristic volume
tf: Normal melting (fusion) point

Latest version available from:

<https://www.chemeo.com/cid/70-498-2/Benzene-1-azido-4-nitro.pdf>

Generated by Cheméo on 2024-04-23 11:29:57.297154337 +0000 UTC m=+16161046.217731649.

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