2-Naphthalenol, 1-[(2,4-dimethylphenyl)azo]-

Other names:

AF Red No. 5
Brasilazina Oil Scarlet 6G
Calco Oil Scarlet BL
Ceres Orange RR
Cerisol Scarlet G
C.I. 12140
C.I. Solvent Orange 7
Ext D and C Red No. 14
Fast Oil Orange II
Fat Scarlet 2G
FD And C red No. 32
Grasan Orange 3R
Japan Red 5
Japan Red 505
Japan Red No.5
Lacquer Orange VR
Oil Orange KB
Oil Orange N Extra
Oil Orange R
Oil Orange 2R
Oil Orange X
Oil Orange XO
Oil Red XO
Oil Scarlet
Oil Scarlet 371
Oil Scarlet BL
Oil Scarlet 6G
Oil Scarlet YS
Red No. 5
Resin Scarlet 2R
Somalia Orange A 2R
Somalia Orange 2R
Sudan II
Sudan orange
Sudan Orange RPA
Sudan Orange RRA
Sudan Red
A.F. Red No. 5
Aizen Food Red No. 5
Brilliant oil scarlet B

Calco oil scarlet ZBL
Ceres oranges RR
Cerotinscharlach G
Ext. D and C Red No. 14
Extract D & C Red No. 14
Fat Red (Yellowish)
Fettorange B
Motirot G
Oil scarlet APYO
Oil scarlet L
Oil scarlet Y
Oil Red Gro
Oil Red RO
Orange Insoluble RR
Orange Oil KB
Ponceau insoluble olg
Pyronalrot R
Red B
Resoform Orange R
Rot B
Rot GG fettloeslich
Solvent Orange 7
Soudan II
Sudan ax
Sudan scarlet 6G
Sudan X
Waxakol vermilion L
1-(o-Xylylazo)-2-naphthol
1-(2,4-Xylylazo)-2-naphthol
1-((2,4-Dimethylphenyl)azo)-2-naphthalenol
1-Xylylazo-2-naphthol
2-Naphthol, 1-(2,4-xylylazo)-
Ext. D and C. Red. No. 14
Oranz rozpoustedlova 7
Sudan 2
1-(2,4-Dimethylphenylazo)-2-naphthol
1-[(2,4-Dimethylphenyl)diazenyl]-2-naphthol
Red 505
2-Naphthalenol, 1-[2-(2,4-dimethylphenyl)diazenyl]-

Inchi: InChI=1S/C18H16N2O/c1-12-7-9-16(13(2)11-12)19-20-18-15-6-4-3-5-14(15)8-10-17(18)

InchiKey: JBTHDAVBDKKSRW-UHFFFAOYSA-N

Formula: C18H16N2O

SMILES: Cc1ccc(N=Nc2c(O)ccc3ccccc23)c(C)c1

Mol. weight [g/mol]: 276.33
CAS: 3118-97-6

Physical Properties

Property code	Value	Unit	Source
chs	-9395.00 ± 20.00	kJ/mol	NIST Webbook
chs	-9576.80	kJ/mol	NIST Webbook
hf	84.78	kJ/mol	Joback Method
hfs	25.00 ± 20.00	kJ/mol	NIST Webbook
hfs	207.00	kJ/mol	NIST Webbook
hvap	83.52	kJ/mol	Joback Method
log10ws	-5.82		Crippen Method
logp	5.578		Crippen Method
mcvol	219.030	ml/mol	McGowan Method
pc	2071.76	kPa	Joback Method
tb	928.34	K	Joback Method
tc	1198.45	K	Joback Method

Sources

NIST Webbook: http://webbook.nist.gov/cgi/cbook.cgi?ID=C3118976&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
McGowan Method: http://link.springer.com/article/10.1007/BF02311772

Legend

chs: Standard solid enthalpy of combustion
hf: Enthalpy of formation at standard conditions
hfs: Solid phase enthalpy of formation 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
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature