# SUDAN II

**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]:** 276.34

# Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| af | 0.8234 | | Cheméo Relay (1.0) |
| chs | -9395.00 ± 20.00 | kJ/mol | NIST Webbook |
| chs | -9576.80 | kJ/mol | NIST Webbook |
| hf | 245.65 | kJ/mol | Cheméo Relay (1.0) |
| hfs | 25.00 ± 20.00 | kJ/mol | NIST Webbook |
| hfs | 207.00 | kJ/mol | NIST Webbook |
| hvap | 105.24 | kJ/mol | Cheméo Relay (1.0) |
| ie | 7.46 | eV | Cheméo Relay (1.0) |
| log10ws | -4.55 | | Cheméo Relay (1.0) |
| logp | 5.578 | | Crippen Method |
| mcvol | 219.030 | ml/mol | McGowan Method |
| pc | 2071.76 | kPa | Joback Method |
| tb | 670.64 | K | Cheméo Relay (1.0) |
| tc | 1013.44 | K | Cheméo Relay (1.0) |
| tf | 389.64 | K | Cheméo Relay (1.0) |
| vc | 0.791 | m3/kmol | Cheméo Relay (1.0) |

# Sources

**Crippen Method:** http://pubs.acs.org/doi/abs/10.1021/ci990307l
**Crippen Method:** https://www.chemeo.com/doc/models/crippen_log10ws
**Cheméo Relay (1.0):**
**Cheméo Relay (1.0, beta):**
**NIST Webbook:** http://webbook.nist.gov/cgi/cbook.cgi?ID=C3118976&Units=SI
**Joback Method:** https://en.wikipedia.org/wiki/Joback_method
**McGowan Method:** http://link.springer.com/article/10.1007/BF02311772

# Legend

**af:** Acentric Factor
**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 |
| **ie:** | Ionization energy |
| **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 |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |