# Sulfur, (2,2-difluoroethenyl)pentafluoro-, (OC-6-21)-

**Inchi:** InChI=1S/C2HF7S/c3-2(4)1-10(5,6,7,8)9/h1H
**InchiKey:** VOYOSNXBEXNYCU-UHFFFAOYSA-N
**Formula:** C2HF7S
**SMILES:** FC(F)=CS(F)(F)(F)(F)F
**Mol. weight [g/mol]:** 190.08
**CAS:** 58636-78-5

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| gf | -1502.44 | kJ/mol | Joback Method |
| hf | -1531.32 | kJ/mol | Joback Method |
| hfus | 18.79 | kJ/mol | Joback Method |
| hvap | 21.77 | kJ/mol | Joback Method |
| log10ws | -4.04 | | Crippen Method |
| logp | 4.023 | | Crippen Method |
| mcvol | 72.080 | ml/mol | McGowan Method |
| pc | 2995.87 | kPa | Joback Method |
| tb | 315.67 | K | Joback Method |
| tc | 463.43 | K | Joback Method |
| vc | 0.344 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 139.48 | J/mol×K | 315.67 | Joback Method |
| cpg | 143.04 | J/mol×K | 340.30 | Joback Method |
| cpg | 146.87 | J/mol×K | 364.92 | Joback Method |
| cpg | 150.92 | J/mol×K | 389.55 | Joback Method |
| cpg | 155.18 | J/mol×K | 414.18 | Joback Method |
| cpg | 159.59 | J/mol×K | 438.80 | Joback Method |
| cpg | 164.14 | J/mol×K | 463.43 | Joback Method |

# Sources

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|---|---|
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C58636785&Units=SI |
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |

# Legend

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|---|---|
| **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 |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **vc:** | Critical Volume |