

# 4-morpholinepropanesulfonic acid

|                      |                                                                             |
|----------------------|-----------------------------------------------------------------------------|
| Other names:         | 3-(N-morpholino)propanesulfonic acid<br>3-morpholinopropane-1-sulfonic acid |
| Inchi:               | InChI=1S/C7H15NO4S/c9-13(10,11)7-1-2-8-3-5-12-6-4-8/h1-7H2,(H,9,10,11)      |
| InchiKey:            | DVLFYONBTKHTER-UHFFFAOYSA-N                                                 |
| Formula:             | C7H15NO4S                                                                   |
| SMILES:              | O=S(=O)([O-])CCC[NH+]1CCOCC1                                                |
| Mol. weight [g/mol]: | 209.27                                                                      |

## Physical Properties

| Property code | Value   | Unit   | Source         |
|---------------|---------|--------|----------------|
| logp          | -2.163  |        | Crippen Method |
| mcvol         | 148.440 | ml/mol | McGowan Method |

## Sources

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| Cheméo Relay (1.0):                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Solubility and phase separation of 4-morpholinepropanesulfonic acid (MOPS), and 3-morpholino-2-hydroxypropanesulfonic acid (MOPSO) in aqueous 1,4-dioxane and ethanol solutions: (Liquid + liquid), (solid + liquid), and (solid + liquid + liquid) equilibria of solvents containing cyclo polymer PVP with biological buffers MES, MOPS and morpholinepropanesulfonic acid (MOPS) and a biological buffer MOPS. MOPS and MOBS in water and in aqueous electrolyte solutions: | <a href="https://www.doi.org/10.1016/j.jct.2011.05.036">https://www.doi.org/10.1016/j.jct.2011.05.036</a><br><a href="http://link.springer.com/article/10.1007/BF02311772">http://link.springer.com/article/10.1007/BF02311772</a>                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Phase Separation of Alcohol (1-Propanol, 2-Propanol, or tert-Butanol) from Its Aqueous Solution in the Presence of Biological Buffer MOPS:                                                                                                                                                                                                                                                                                                                                     | <a href="https://www.doi.org/10.1016/j.jct.2014.11.002">https://www.doi.org/10.1016/j.jct.2014.11.002</a><br><a href="https://www.doi.org/10.1016/j.jct.2015.07.022">https://www.doi.org/10.1016/j.jct.2015.07.022</a><br><a href="https://www.doi.org/10.1016/j.tca.2010.04.004">https://www.doi.org/10.1016/j.tca.2010.04.004</a><br><a href="https://www.chemeo.com/doc/models/crippen_log10ws">https://www.chemeo.com/doc/models/crippen_log10ws</a><br><a href="https://www.doi.org/10.1021/acs.jced.6b00954">https://www.doi.org/10.1021/acs.jced.6b00954</a><br><a href="http://pubs.acs.org/doi/abs/10.1021/ci990307l">http://pubs.acs.org/doi/abs/10.1021/ci990307l</a> |

## Legend

|        |                                     |
|--------|-------------------------------------|
| logp:  | Octanol/Water partition coefficient |
| mcvol: | McGowan's characteristic volume     |

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