

The table below shows the water solubility of 3 neonics and their octanol-water partition coefficient (Kow). The lower the log of the coefficient, the more the molecule is soluble in water.

	Log <a href="#">Kow</a> <sup>1</sup>	Water Solubility (mg/l)
Imidacloprid	0,57	610
Thiamethoxam	- 0,13	4100
Clothianidin	0,905	340

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<sup>i</sup> **Octanol-Water Partition Coefficient (K<sub>OW</sub>)** - "A coefficient representing the ratio of the solubility of a compound in octanol (a non-polar solvent) to its solubility in water (a polar solvent). The higher to K<sub>OW</sub>, the more non-polar the compound. Log K<sub>OW</sub> is generally used as a relative indicator of the tendency of an organic compound to adsorb to soil. Log K<sub>OW</sub> values are generally inversely related to aqueous solubility and directly proportional to molecular weight." - U.S. Environmental Protection Agency, 2009 (see <http://toxics.usgs.gov/definitions/kow.html>)