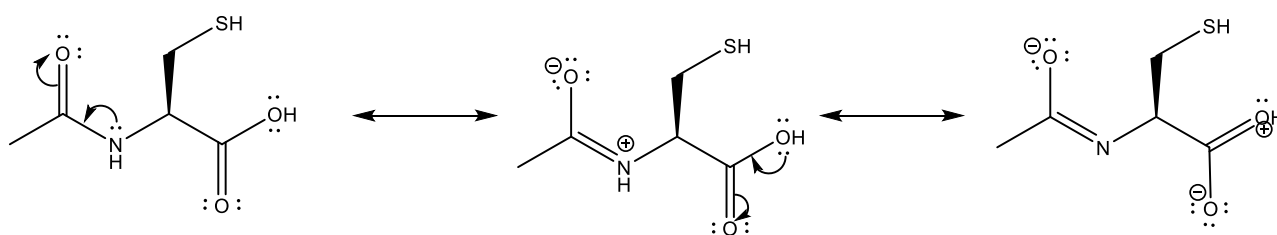


Answer on Question#72215 – Chemistry – Inorganic chemistry

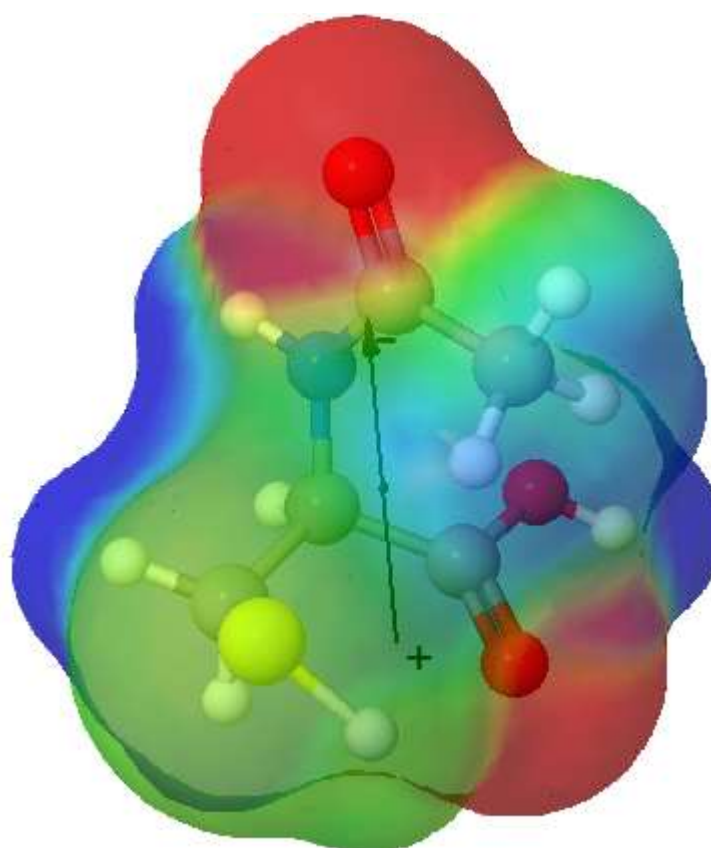
Question: What's the polarity of acetylcysteine?

Answer:

Acetylcysteine is a derivative of non-polar amino acid cysteine. It has non-polar side chain - CH₂SH as well. However, acetylcysteine is the polar molecule because has polar functional groups (N-acyl group and carboxylic acid group). The distribution of electron density is showed via couple of resonance form of acetylcysteine:



Dipole as measure of polarity is calculated via Molecular calculator (<http://molcalc.org>) and it equals 4.83 Debye.



Blue: Positive, Red: Negative