dipole moment for sf4

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Why do some ionic compounds have some solubility in water ... - Socratic

For sodium chloride, these intramolecular or interparticle interactons, are compensated for by the making of ion-dipole bonds when sodium chloride dissolves in water, and the water dipoles solvate the individual ions; we write N a+(aq) to represent this, a shorthand for [N a(OH 2)6]+.

Question #8cf1f + Example - Socratic

You should probably go through each type of intermolecular force, and see if it is there. The order of precedence for each type of intermolecular force is: hydrogen bond permanent dipole-dipole interactions London forces The most powerful types of intermolecular force are the ones with the greatest ionic character. These will occur between atoms with the greatest difference in ...

Question #0df6a - Socratic

Polar molecules interact with each other by strong attractive dipole-dipole interactions whether polar molecules interact with non-polar molecules through dipole- induced dipole interactions (a weak dipole induced subject to charge of a dipole similar to the way a permanent magnet induces a temporary magnetism on a metal).

Question #9a99f - Socratic

You have got the essential idea already, that Van dear Waals forces are local, temporary bonds between adjacent molecules. Within that class of weak bonds there are two reasons why it may occur: (i) the electrons in a molecule are constantly changing positions and may for an instant be more concentrated at one end than the other. This gives rise to dipole-dipole interactions (a dipole is ...

How can a dipole exist? How can the two charges stay stable ... - Socratic

For an electric dipole to exist an external electric field is required. Two charges alone (one positive and one negative) will not be stable. This is because the charges will attract one another, so the distance between them will decrease over time. If the charges are in an external electric field, then the dipole may be stable as there is the possibility of zero net force acting on each ...

Question #d4d89 - Socratic

Ideality assumes minimal interaction between the gaseous particles. For hydrogen chloride, a potent intermolecular force can operates: hydrogen bonding, in that the hydrogen is bound to a strongly electronegative chlorine to give the $-\delta Cl - H \, \delta+$ dipole, which can act intermolecularly. Possibly the

best metric with which to compare this is the boiling point of the gases: helium has a ...

How does electronegativity affect dipole moment? - Socratic

See below. Dipoles are created when one element has a higher electronegativity (tendency to attract electrons) than another in a bond. The electronegativity difference has to be more than 0.3 for a dipole to be formed. Dipole moment is the overall dipole strength measure of the dipoles in a molecule, and the higher the electronegativity difference, the greater the dipole moment. I hope that helps!

Question #8e98a - Socratic

This gives an individual CH_3Cl molecule a side that is more negative than the other, otherwise known as a dipole moment. Since every CH_3Cl molecule is like this, the CH_3Cl molecules can form stronger bonds with each other, having the partially negative end of one molecule form bonds with the partially positive end of another molecule.

Questions asked by Pankaj Solanki - Socratic

What is the magnitude of the electric dipole moment of this system? Three point charges of +2q, -q and -q are placed at the corners A, B and C of an equilateral triangle ABC of side 'x'. What is the magnitude of the electric dipole moment of this system?

Question #845d9 + Example - Socratic

The inductive effect is the effect on electron density in one portion of a molecule caused by electron-withdrawing or electron-donating groups elsewhere in the molecule. In a covalent bond between two atoms of unequal electronegativity, the more electronegative atom draws electron density towards itself. This causes the δ^+ and δ^- charges of the bond dipole. $"H"^{(\delta+)}-"Cl"^{(\delta-)}$ If the ...