

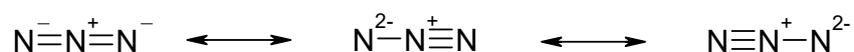
Answer on Question #75969, Chemistry / Inorganic Chemistry

Question:

Explain giving suitable structure why ionic azides are more stable than covalent azides.

Answer:

The azide-anion (N_3^-) can be described as follows:



The first structure predominates. It is linear, symmetric and non-polar. Therefore, the azide-anion is stable enough.

In case of covalent azides there is no symmetry and the azide group is polar. This leads to decreasing of stability of the group. The structure can be described as follows:

