

What is the chemical character of Ca? I thought it was metallic, however the "correct answer" states - basic. Is that correct? if yes, why? Is this also valid for Ca(OH)_2 ?

Solution:

All substances can be divided into simple (consisting of atoms of one chemical element) and complex (consisting of atoms of different chemical elements). Simple substances are divided into metals and non-metals and (metalloids).

Metals are located in the Periodic Table to the left of the stepped diagonal line, which starts from B and ends with Po (except Ge and Sb).

So, due to this, Ca is a metal.

In groups all elements have the same properties. Some groups are so important that it gets special names. For example, group IIA (Ca) - alkaline earth metals. The atoms of the elements of this group have two electrons in the outer electron layer, which also give up during chemical reactions.

Complex substances are divided into organic and inorganic. Inorganic substances are divided into classes either by composition or by functional features. The most important classes of inorganic compounds, distinguished by functional characteristics, include salts, acids, bases and oxides.

Bases – substances, whose molecules consist of metal ions or (an ammonium ion) and one (or several) hydroxogroup OH^- . In an aqueous solution it dissociates with the formation of cations and anions (OH^-).

So, Ca(OH)_2 is complex inorganic basic substance.