Claims

[Claim 1]
An explosive composition comprising at least one explosive and at least one organic heteroatom compound, the organic heteroatom compound comprising at least one heteroatom selected from the group consisting of Si, S, Cr, Sn, Ge, Ti, Zr, V, Nb, Ta, Mo, W, Mn, Ni, Cu, Ag, Cd, Hg, As, Sb, Bi, Se, Te, Co, Xe, F, Y, and lanthanoids, wherein the composition comprises from 90 to 99.99 mass% of the explosive and from 0.01 to 10 mass% of the heteroatom compound.

[Claim 2]
The explosive composition according to claim 1, wherein the explosive comprises at least one selected from the group consisting of trinitrotoluene (TNT), cyclotrimethylene trinitramine (hexogen, RDX), cyclotetramethylene tetranitramine (octogen), trinitrophenyl methylnitramine (tetryl), pentaerythritol tetranitrate (PETN), tetranitromethane (TNM), triamino-trinitrobenzene, hexanitrostilbene, and diaminodinitrobenzofuroxan.

[Claim 3]
The explosive composition according to any one of claims 1 to 2, wherein a particle size of the explosive and/or the organic heteroatom compound is 10 mm or less.

[Claim 4]
A method for producing the explosive composition according to any one of claims 1 to 3, the method comprising mixing the explosive and the organic heteroatom compound as a dry powder, in a molten state, or using a solvent, and forming the mixture by pressing or casting.

[Claim 5]
The method for producing the explosive composition according to claim 4, wherein the explosive composition is produced by mixing the explosive and/or the organic heteroatom compound having a particle size of 10 mm or less as a dry powder or in a molten state.

[Claim 6]
A method for producing a heteroatom-doped nanodiamond, the method comprising exploding the explosive composition according to any one of claims 1 to 3 in a sealed container.