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 B, Si, S, Cr, Sn, Al, Ge, Li, Na, K, Cs, Mg, Ca, Sr, Ba, Ti, Zr, V, Nb, Ta, Mo, W, Mn, Ni, Cu, Ag, Cd, Hg, Ga, In, Tl, As, Sb, Bi, Se, Te, Co, Xe, F, Y, and lanthanoids.

[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 claim 1 or 2, wherein the organic heteroatom compound is an aryl heteroatom compound.

[Claim 4]
The explosive composition according to any one of claims 1 to 3, comprising from 80 to 99.9999 mass% of the explosive and from 0.0001 to 20 mass% of the organic heteroatom compound.

[Claim 5]
The explosive composition according to any one of claims 1 to 4, wherein a particle size of the explosive and/or the organic heteroatom compound is 10 mm or less.

[Claim 6]
A method for producing the explosive composition according to any one of claims 1 to 5, 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 7]
The method for producing the explosive composition according to claim 6, 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 8]
A method for producing a heteroatom-doped nanodiamond, the method comprising exploding the explosive composition according to any one of claims 1 to 5 in a sealed container.