

A metformin starting material for incorporation into a pharmaceutical dosage form comprising metformin or a physiologically acceptable salt thereof, wherein the content of metformin is at least 99.0 wt- %, relative to the total weight of the metformin starting material, wherein the material has a content of dimethylamine of not more than 180 ppm, relative to the weight of metformin, and wherein metformin is present as a powder having a volume median diameter D(50) of not more than 200 um, determined by laser diffraction analysis. A process for the preparation of a metformin starting material, the process comprising the steps of: (i) providing metformin or a physiologically acceptable salt thereof; (ii) grinding the metformin or physiologically acceptable salt thereof thereby obtaining ground metformin or physiologically acceptable salt thereof; and(iii) subjecting the metformin or physiologically acceptable salt thereof, or the ground metformin or physiologically acceptable salt thereof, to elevated temperature and/or reduced pressure thereby obtaining dried metformin or physiologically acceptable salt thereof. A process for the preparation of a pharmaceutical dosage form comprising metformin or a physiologically acceptable salt thereof and having a content of N-nitroso dimethylamine of not more than 48 ppb, relative to the total weight of metformin in the pharmaceutical dosage form, wherein the process comprises the aforementioned process.