We claim:

1. A process for the preparation of 1-(6-methylpyridin-3-yl)-2-[(4-(methylsulphonyl)phenyl]ethanone of the formula I.

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comprising:

a) condensing 4-(methylthio)phenylacetonitrile of formula IV with a 6-methylnicotinic ester of formula V to give 3-[2-(4-(methylthio)phenyl)-2-cyanoacetyl](6-methyl)pyridine of formula III;

b) hydrolysing and decarboxylating 3-[2-(4-(methylthio)phenyl)-2-cyanoacetyl](6-methyl)pyridine of formula III in presence of H₂SO₄ and in absence of mixture of acetic acid and HClto obtain 3-[2-(4-(methylthio)phenyl)acetyl](6-methyl)pyridine of formula II;

c) insitu oxidation of 3-[2-(4-(methylthio)phenyl)acetyl](6-methyl)pyridine of formula II in presence of hydrogen peroxide, H₂SO₄, & acetic acid and in absence of an alkali metal tungstate catalyst to give Ketosulfone of formula I; and

- d) optional purification of obtained ketosulfone using methanol to obtain tungsten free ketosulfone of formula I.
- 2. A process according to claim 1 wherein the condensation in step a is carried out in presence of an alkali metal alkoxide selected from sodium methoxide and potassium tertbutoxide.
- 3. A process according to claim 1 wherein the condensation in step a is carried out in presence of lower alcohol such as methanol, ethanol and/or an aromatic hydrocarbon solvent such as toluene.
- 4. A process according to claim 1 wherein the condensation in step a is carried out at temperature 70 to 110 °C, preferably 100 to 110 °C.
- 5. A process according to claim 1 wherein the hydrolysis and decarboxylation in step b is carried out at a temperature 90 to 110 °C.
- 6. A process according to claim 1 wherein the obtained ketosulfone of formula I is purified using methanol hot pulping.
- 7. Ketosulfone having individual impurity less than 0.1% and free from tungsten.

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