CLAIMS

1. A solid composition for reducing heavy metals in flue gases comprising a mineral compound, non-functionalized, doped with a halide salt, i.e. for which the surface accessible to flue gases is partly or completely covered with a halide salt said mineral compound being selected from the group consisting of halloysite, calcium or magnesium hydroxides, as well as of mixtures thereof, said halide salt being present in an amount on a dry basis ranging from 0.5% to 20% by weight of halide salt on the basis of the weight of the composition.

2. The composition according to claim 1, wherein said halide salt is an inorganic halide salt.

3. The composition according to claim 1 or 2, wherein said mineral compound is preferably selected from the group consisting of halloysite, slaked lime, as well as mixtures thereof.

4. The composition according to any of claims 1 to 3, wherein said halide salt is present in an amount on a dry basis ranging from 1% to 15% by weight and in particular from 1.5% to 10% by weight of halide salt on the basis of the weight of the composition.

5. The composition according to any of the preceding claims, wherein said halide salt is an alkaline halide, an earth alkaline halide or the like, preferably selected from the group consisting of NaCl, NaBr, NaI, KCl, KBr, KI, $CaCl_2$, CaBr2, CaI_2, $MgCl_2$, $MgBr_2$, MgI_2, NH_4Cl, NH_4Br or NH_4I or mixtures thereof.

6. The composition according to any of the preceding claims, wherein the mineral compound is in powdery form and has a d_{90} of less than 1mm and in particular a particle size comprised between 1µm and 1mm.

7. A method for preparing a composition for reducing heavy ~~minerals~~metals in flue gases according to any of claims 1 to 6 comprising the steps:

- supplying a mineral compound selected from the group consisting of halloysite, calcium or magnesium hydroxides as well as mixtures thereof,
- supplying a halide salt, and
- putting into contact said mineral compound and said halide salt with formation of a mineral compound doped with the halide salt, said halide salt being present in an amount on a dry basis ranging from 0.5% to 20% by weight of halide salt on the basis of the weight of the composition.

8. The method according to claim 7, wherein said putting into contact of said mineral compound and of said halide salt is achieved with stirring.

9. The method according to claim 7 or claim 8 wherein said supplied

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2. The composition according to claim 1, wherein said halide salt is an inorganic halide salt.

3. The composition according to claim 1 or 2, wherein said mineral compound is preferably selected from the group consisting of halloysite, slaked lime, as well as mixtures thereof.

4. The composition according to any of claims 1 to 3, wherein said halide salt is present in an amount on a dry basis ranging from 1% to 15% by weight and in particular from 1.5% to 10% by weight of halide salt on the basis of the weight of the composition.

5. The composition according to any of the preceding claims, wherein said halide salt is an alkaline halide, an earth alkaline halide or the like, preferably selected from the group consisting of NaCl, NaBr, Nal, KCl, KBr, Kl, $CaCl_2$, CaBr2, Cal_2, $MgCl_2$, $MgBr_2$, Mgl_2, NH_4Cl, NH_4Br or NH_4I or mixtures thereof.

6. The composition according to any of the preceding claims, wherein the mineral compound is in powdery form and has a d_{90} of less than 1mm and in particular a particle size comprised between 1µm and 1mm.

7. A method for preparing a composition for reducing heavy metals in flue gases according to any of claims 1 to 6 comprising the steps:

- supplying a mineral compound selected from the group consisting of halloysite, calcium or magnesium hydroxides as well as mixtures thereof,
- supplying a halide salt, and
- putting into contact said mineral compound and said halide salt with formation of a mineral compound doped with the halide salt, said halide salt being present in an amount on a dry basis ranging from 0.5% to 20% by weight of halide salt on the basis of the weight of the composition.

8. The method according to claim 7, wherein said putting into contact of said mineral compound and of said halide salt is achieved with stirring.

9. The method according to claim 7 or claim 8 wherein said supplied