Claims:

1 . A process for the preparation of an aqueous slurry comprising a plurality of polyisobutylene particles suspended therein, the process comprising at least the steps of:
A) contacting an organic medium comprising
i) polyisobutylene and
ii) an organic diluent
with an aqueous medium comprising at least one LCST compound having a cloud point of 0 to 100°C, 5 to 100°C, 15 to 80°C or20 to 70°C and
B) removing at least partially the organic diluent to obtain the aqueous slurry comprising the polyisobutylene particles.

2. The process according to claim 1, wherein LCST compounds are those having a cloud point of 0 to 100°C, 5 to 100°C, 15 to 80°C or20 to 80°C determined by at least one of the following methods:
• DIN EN 1890 of September 2006, method A
• DIN EN 1890 of September 2006, method C
• DIN EN 1890 of September 2006, method E
• DIN EN 1890 of September 2006, method A wherein the amount of compound tested is reduced from 1 g per 100 ml of distilled water to 0.05 g per 100 ml of distilled water
• DIN EN 1890 of September 2006, method A wherein the amount of compound tested is reduced from 1 g per 100 ml of distilled water to 0.2 g per 100 ml of distilled water.

3. The process according to claim 1, wherein LCST compounds are those having a cloud point of 0 to 100°C, 5 to 100°C, 15 to 80°C or20 to 80°C determined by at least one of the following methods:
• DIN EN 1890 of September 2006, method A
• DIN EN 1890 of September 2006, method E
• DIN EN 1890 of September 2006, method A wherein the amount of compound tested is reduced from 1 g per 100 ml of distilled water to 0.05 g per 100 ml of distilled water.

4. The process according to claim 1 , wherein LCST compounds are those having a cloud point of 0 to 100°C, 5 to 100°C, 15 to 80°C or20 to 80°C determined by at least one of the following methods:

• DIN EN 1890 of September 2006, method A
• DIN EN 1890 of September 2006, method C
• DIN EN 1890 of September 2006, method A wherein the amount of compound tested is reduced from 1 g per 100 ml of distilled water to 0.05 g per 100 ml of distilled water.

5. The process according to one of claims 1 to 4, wherein the organic medium comprising polyisobutylene and an organic diluent is obtained from a polymerization reaction.

6. The process according to one of claims 1 to 5, wherein the organic medium is obtained from a polymerization reaction and further contains residual polyisobutylene of the polymerization reaction.

7. The process according to one of claims 1 to 6, wherein the aqueous medium further contains non-LCST compounds, whereby the non-LCST compounds are selected from the group consisting of ionic or non-ionic surfactants, emulsifiers, and anti-agglomerants or are in another embodiment salts of mono- or multivalent metal ions or are in another embodiment stearates or palmitates of mono- or multivalent metal ions or are in another embodiment sodium, potassium, calcium and zinc stearates or palmitates and calculated with respect to the amount of polyisobutylene present in the organic medium.

8. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 20.000 ppm or less, 10.000 ppm or less, 8.000 ppm or less, 5,000 ppm or less 2.000 ppm or less or1.000 ppm or less of non-LCST compounds, whereby the non-LCST compounds are
• selected from the group consisting of ionic or non-ionic surfactants, emulsifiers, and anti-agglomerants or are in another embodiment
• salts of mono- or multivalent metal ions or are in another embodiment
• stearates or palmitates of mono- or multivalent metal ions or are in another embodiment
• sodium, potassium, calcium and zinc stearates or palmitates and calculated with respect to the amount of polyisobutylene present in the organic medium.

9. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 500 ppm or less, 100 ppm or less, 50 ppm or less, 30 ppm or less or10 ppm or less of non-LCST compounds, whereby the non-LCST compounds are
• selected from the group consisting of ionic or non-ionic surfactants, emulsifiers, and anti-

agglomerants or are in another embodiment

• salts of mono- or multivalent metal ions or are in another embodiment

• stearates or palmitates of mono- or multivalent metal ions or are in another embodiment

• sodium, potassium, calcium and zinc stearates or palmitates and calculated with respect to the amount of polyisobutylene present in the organic medium.

10. The process according to one of claims 1 to 7, wherein the aqueous medium comprises from 0 to 5,000 ppm, from 0 to 2,000 ppm, from 10 to 1,000 ppm, from 50 to 800 ppm or from 100 to 600 ppm of salts of mono or multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

11. The process according to one of claims 1 to 7, wherein the aqueous medium comprises from 0 to 5,000 ppm, from 0 to 2,000 ppm, from 10 to 1,000 ppm, from 50 to 800 ppm or from 100 to 600 ppm of salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

12. The process according to one of claims 1 to 11, wherein the weight ratio of salts of stearates, palmitates and oleates of mono- and multivalent metal ions to the LCST compounds is of from 1:2 to 1:100, 1:2 to 1:10 orfrom 1:5 to 1:10 in the aqueous medium.

13. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 550 ppm or less, 400 ppm or less, 300 ppm or less, 250 ppm or less 150 ppm or less or100 ppm or less of salts of metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

14. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 550 ppm or less, 400 ppm or less, 300 ppm or less, 250 ppm or less 150 ppm or less or100 ppm or less of salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

15. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 8,000 ppm or less, 5,000 ppm or less, 2,000 ppm or less, y 1,000 ppm or less, 500 ppm or less, 100 ppm or less 15 ppm or less or from 1 ppm to 10 ppm of non-ionic surfactants being non-LCST compounds selected from the group consisting of ionic or non-ionic surfactants,

emulsifiers, and anti-agglomerants and with respect to the amount of polyisobutylene present in the organic medium.

16. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 70 ppm or less, 50 ppm or less, 30 ppm or less 20 ppm or less or10 ppm or less of salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

17. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 25 ppm or less, 10 ppm or less, 8 ppm or less 7 ppm or less or5 ppm or less of salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobuty-lene present in the organic medium.

18. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 550 ppm or less, 400 ppm or less, 300 ppm or less, 250 ppm or less 150 ppm or less or100 ppm or less of carboxylic acid salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobuty- lene present in the organic medium, whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

19. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 70 ppm or less, 50 ppm or less, 30 ppm or less 20 ppm or less or10 ppm or less of carboxylic acid salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium, whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

20. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 25 ppm or less, 10 ppm or less, 8 ppm or less 7 ppm or less or5 ppm or less of carboxylic acid salts of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium, whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

21. The process according to one of claims 1 to 20, wherein the aqueous medium one embodiment the aqueous medium is free of carboxylic acid salts of multivalent metal ions whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

22. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 100 ppm or less, 50 ppm or less, 20 ppm or less 15 ppm or less or10 ppm or less of salts of monovalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

23. The process according to one of claims 1 to 7, wherein the aqueous medium comprises additionally or alternatively 100 ppm or less, 50 ppm or less, 30 ppm or less, 20 ppm or less 10 ppm or less or5 ppm or less of carboxylic acid salts of monovalent metal ions such as sodium stearate, sodium palmitate and sodium oleate and potassium stearate, potassium palmitate and potassium oleate calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium, whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

24. The process of claim 24, wherein

25. The process according to one of claims 1 to 24, wherein the aqueous medium is free of carboxylic acid salts of monovalent metal ions whereby the carboxylic acids are selected from those having 6 to 30 carbon atoms, 8 to 24 carbon atoms, or12 to 18 carbon atoms.

26. The process according to one of claims 18 to 25, wherein the carboxylic acids are selected from monocarboxylic acids, saturated monocarboxylic acids, more or palmitic or stearic acid.

27. The process according to one of claims 1 to 7, wherein the aqueous medium comprises from 0 to 5,000 ppm, from 0 to 2,000 ppm, from 10 to 1,000 ppm, from 50 to 800 ppm or from 100 to 600 ppm of

• carbonates of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium or in another embodiment of

• magnesium carbonate and calcium carbonate calculated on their metal content and with

respect to the amount of polyisobutylene present in the organic medium.

28. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 550 ppm or less, 400 ppm or less, 300 ppm or less, 250 ppm or less 150 ppm or less or100 ppm or less of

• carbonates of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium or in another embodiment of

• magnesium carbonate and calcium carbonate calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium

29. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 70 ppm or less, 50 ppm or less, 30 ppm or less 20 ppm or less or10 ppm or less of

• carbonates of multivalent metal ions calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium or in another embodiment of

• magnesium carbonate and calcium carbonate calculated on their metal content and with respect to the amount of polyisobutylene present in the organic medium.

30. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 500 ppm or less, 200 ppm or less, 100 ppm or less, 50 ppm or less 20 ppm or less orno layered minerals such as talcum calculated with respect to the amount of polyisobutylene present in the organic medium.

31. The process according to one of claims 1 to 7, wherein the aqueous medium comprises 500 ppm or less, 200 ppm or less, 100 ppm or less, 20 ppm or less 10 ppm or less or5 ppm or less orno dispersants, emulsifiers or anti-agglomerants other than LCST compounds.

32. The process according to one of claims 1 to 31, wherein polyisobutylene particles are discrete particles of any form and consistency, which in a preferred embodiment have a particle size of between 0.05 mm and 25 mm, orbetween 0.1 and 20 mm.

33. The process according to one of claims 1 to 32, wherein polyisobutylene particles have a weight average particle size of from 0.3 to 10.0 mm.

34. The process according to one of claims 1 to 33, wherein the aqueous medium comprises of from 1 to 2,000 ppm of antioxidants and/or stabilizers, from 50 to 1,000 ppm orfrom 80 to 500 ppm calculated with respect to the amount of polyiso-butylene present in the organic medium, whereby preferred antioxidants and stabilizers are 2,6-di-tert-butyl-4-methyl-phenol, pentaerythrol-tetrakis-[3-(3,5-di-tert-butyl-4-hydroxy- phenyl)-propanoic acid, octadecyl 3,5-di(tert)-butyl-4-hydroxyhydrocinnamate, tert-butyl-4-hydroxy anisole, 2-(1,1-dimethyl)-1,4-benzenediol, tris(2,4,-di-tert-butylphenyl)phosphate, dioctyldiphenylamine, butylated products of p-cresol and dicyclopentadiene or 2,4,6-tri-tert-butylphenol, 2,4,6 tri-isobutylphenol, 2-tert-butyl-4,6-dimethylphenol, 2,4-dibutyl-6-ethyl-phenol, 2,4-dimethyl-6-tert-butylphenol, 2,6-di-tert-butylhydroyxytoluol (BHT), 2,6-di-tert-butyl-4-ethylphenol, 2,6-di-tert-butyl-4-n-butylphenol, 2,6-di-tert-butyl-4-iso-butylphenol, 2,6-dicyclopentyl-4-methylphenol, 4-tert-butyl-2,6-dimethylphenol, 4-tert-butyl-2,6-dicyclo-pentylphenol, 4-tert-butyl-2,6-diisopropylphenol, 4,6-di- tert-butyl-2-methylphenol, 6-tert-butyl-2,4-dimethylphenol, 2,6-di-tert-butyl-3-methylphenol, 4-hydroxymethyl-2,6-di-tert-butylphenol, 2,6-di-tert-butyl-4-phenylphenol and 2,6-dioctadecyl-4-methylphenol, 2,2-ethylidene-bis[4,6-di-tert-butylphenol], 2,2-ethylidene-bis[6-tert-butyl-4-isobutylphenol], 2,2-isobutylidene-bis[4,6-dimethyl-phenol], 2,2methylene-bis[4,6-di-tert-butylphenol], 2,2-methylene-bis[4-methyl-6-(α-methylcyclohexyl)phenol], 2,2-methylene-bis[4-methyl-6-cyclohexylphenol], 2,2-methylene-bis[4-methyl-6-nonylphenol], 2,2-methylene-bis[6-(α,α-dimethylbenzyl)-4-nonylphenol], 2,2-methylene-bis[6-(α-methylbenzyl)-4-nonylphenol], 2,2-mnethylene-bis[6-cyclohexyl-4-methylphenol], 2,2-methylene-bis[6-tert.-butyl-4-ethyl-phenol], 2,2-methylene-bis[6-tert-butyl-4-methylphenol], 4,4-butylidene-bis[2-tert-butyl-5-methylphenol], 4,4-methylene-bis[2,6-di-tert-butylphenol], 4,4-methylene-bis[6-tert-butyl-2-methylphenol], 4,4-isopropylidene-diphenol, 4,4'-decylidene-bisphenol, 4,4'-dodecyli-dene-bisphenol, 4,4-(1-methyloctylidene)bisphenol, 4,4-cyclohexylidene-bis(2-methyl-phenol), 4,4-cyclohexylidenebisphenol, and pentaerythrol-tetrakis-[3-(3,5-di-tert-butyl-4-hydroxyl-phenyl)-propanoic acid.

35. The process according to one of claims 1 to 31, wherein the viscosity averaged molecular weight (Mv) of the polyisobutylene is in the range from 100 to 3,000 kg/mol, in the range from 250 to 3,000 kg/mol in the range from 100 to 2,000 kg/mol, in the range from 200 to 2,000 kg/mol, in the range from 350 to 1,800 kg/mol, in the range of from 400 to 1,500 kg/mol orfrom 700 to 1300 kg/mol or the viscosity averaged molecular weight (Mv) of the polyisobutylene is in the range of from 2,001 to 3,000 kg/mol or the viscosity averaged

molecular weight (Mv) of the polyisobutylene is in the range of from 3.001 to 10,000 kg/mol.

36. The process according to one of claims 1 to 35, wherein the polyisobutylene has a polydispersity of the polyisobutylenes according to the invention is in the range of 3.0 to 5.5 as measured by the ratio of weight average molecular weight to number average molecular weight as determined by gel permeation chromatography.

37. The process according to one of claims 1 to 36, wherein the polyisobutylene has a Mooney viscosity of at least 10 (ML 1 + 8 at 125°C, ASTM D 1646), from 10 to 80, from 20 to 80 orfrom 25 to 60 (ML 1 + 8 at 125°C, ASTM D 1646).

38. The process according to one of claims 1 to 37, wherein the organic medium is obtained by a process comprising at least the steps of:
a) providing a reaction medium comprising an organic diluent, and isobutylene b) polymerizing the isobutylene within the reaction medium in the presence of an initiator system or catalyst to form an organic medium comprising the polyisobutylene, the organic diluent and optionally residual isobutylene.

39. The process according to claim 38, wherein the isobutylene is present in the reaction medium in an amount of from 0.01 wt.-% to 80 wt.-%, from 0.1 wt.-% to 65 wt.-%, from 10.0 wt.-% to 65.0 wt.-% orfrom 25.0 wt.-% to 65.0 wt.-%.

40. The process according to one of claims 37 to 39, wherein the polymerization according to step b) is carried out either as slurry polymerization or solution polymerization.

41. The process according to one of claims 37 to 40, wherein step b) is carried out batchwise or continuously.

42. The process according to one of claims 37 to 41, wherein in step b) at least one control agent for the initiator system is employed.

43. The process according to claim 42, wherein the at least one control agent comprises ethylene, mono- or di-substituted C_3-C_{20} monoalkenes, monosubstituted C_3-C_{20} monoalkenes,

or(C_3-C_{20})-1-alkenes, such as 1-butene, applied in an amount of from 0.01 to 20 wt.-% calculated on the monomers employed in step a), orin an amount of from 0.2 to 15 wt.-% orin an amount of from 1 to 15 wt.-%.

44. The process according to claim 42 or 43, wherein the at least one control agent comprises diisobutylene, in an amount from 0.001 to 3 wt.-% calculated on the monomers employed in step a), orin an amount from 0.01 to 2 wt.-% orin an amount from 0.01 to 1 .5 wt.-%.

45. The process according to one of claims 37 to 44, wherein the initiator comprises aluminium trichloride, in a wt. -ratio of isobutylene to aluminum trichloride of 500 to 20,000, or1,500 to 10,000.

46. The process according to claim 45, wherein water and/or alcohols, is
used as proton source, in an amount of from 0.05 to 2.0 moles of water per mole of aluminum in the aluminum trichloride, orin the range of 0.1 to 1.2 moles of water per mole of aluminum in the aluminum trichloride.

47. The process according to one of claims 37 to 46, wherein the temperature in step A) is from 10 to 100°C, from 50 to 100°C, from 60 to 95°C anor from 75 to 95°C.

48. The process according to one of claims 1 to 47, wherein the at least one LCST compound is selected from the group consisting of:
poly(N-isopropylacrylamide), poly(N-isopropylacrylamide-co-N,N-dimethylacrylamide, poly(N-isopropylacrylamide)-alt-2-hydroxyethylmethacrylate, poly(N-vinylcaprolactam), poly(N,N-diethylacrylamide), poly[2-(dimethylamino)ethyl methacrylate], poly(2-oxazoline) glycopolymers, poly(3-ethyl-N-vinyl-2-pyrrolidone), hydroxylbutyl chitosan, polyoxy-ethylene (20) sorbitan monostearate, polyoxyethylene (20) sorbitan monolaurate, poly-oxyethylene (20) sorbitan monooleate, methyl cellulose, hydroxypropyl cellulose, hydroxyl-ethyl methylcellulose, hydroxypropyl methylcellulose, poly(ethylene glycol) methacrylates with 2 to 6 ethylene glycol units, and polyethyleneglycol-co-polypropylene glycols.
49. The process according to claim 48, wherein the polyethyleneglycol-co-polypropylene glycols are those with 2 to 6 ethylene glycol units and 2 to 6 polypropylene units, compounds of formula (I) (I) HO-[-CH_2-CH_2-O]$_x$-[-CH(CH_3)-CH_2-O]$_y$-[-CH_2-CH_2-O]$_z$-H with y = 3 to

10 and x and z = 1 to 8, whereby y+x+z is from 5 to 18, polyethyleneglycol-co-polypropylene glycol.

50. The process according to claim 49, wherein the 5 to 18, polyethyleneglycol-co-polypropylene glycol are those with 2 to 8 ethylene glycol units and 2 to 8 polypropylene units, ethoxylated iso-$C_{13}H_{27}$- alcohols.

51. The process according to claim 50, wherein the alcohols have an ethoxylation degree of: 4 to 8, polyethylene glycol with 4 to 50, or 4 to 20 ethyleneglycol units, polypropylene glycol with 4 to 30, or 4 to 15 propyleneglycol units, polyethylene glycol monomethyl, dimethyl, mono-ethyl and diethyl ether with 4 to 50, or 4 to 20 ethyleneglycol units, polypropylene glycol monomethyl, dimethyl, monoethyl and diethyl ether with 4 to 50, or 4 to 20 propyleneglycol units.

52. The process of claim 51 wherein the alcohols also possess hydroxyethyl cellulose, methyl cellulose, hydroxypropyl cellulose, hydroxyethyl methylcellulose or hydroxylpropyl methylcellulose.

53. The process according to one of claims 1 to 52, wherein the amount of LCST compound(s) present in the aqueous medium employed in step A) is from 1 to 20,000 ppm, 3 to 10,000 ppm, 5 to 5,000 ppm or10 to 5,000 ppm with respect to the amount of polyisobutylene present in the organic medium.

54. The process according to one of claims 1 to 53, wherein the amount of LCST compound(s) present in the aqeuous medium employed in step A) is of from 1 to 5,000 ppm, 3 to 1,000 ppm, 5 to 500 ppm or5 to 100 ppm with respect to the amount of polyisobutylene present in the organic medium.

55. The process according to one of claims 1 to 54, wherein the LCST compounds exhibit a molecular weight of at least 1,500 g/mol, at least 2,500 g/mol or at least 4,000 g/mol.

56. The process according to one of claims 38 to 55, comprising a further step C) wherein the polyisobutylene particles contained in the aqueous slurry obtained according to step B) are

separated to obtain isolated polyisobutylene particles.

57. The process according to one of claims 38 to 55, comprising further step C) wherein the polyisobutylene particles contained in the aqueous slurry obtained according to step B) are separated to obtain isolated polyisobutylene particles and further step D) wherein the (isolated) polyisobutylene particles are dried, to a residual content of volatiles of 7,000 or less, 5,000 or less, 4,000 or less 2,000 ppm or less, or1,000 ppm or less.

58. The process according to one of claims 1 to 57, comprising as a further step shaping of the polyisobutylene particles to obtain reshaped polyisobutylene particles such as pellets or shaped articles such as bales.

59. Polyisobutylene composition, in particular polyisobutylene particles and reshaped polyisobutylene particles comprising
I) 96.0 wt.-% or more, 97.0 wt.-% or more, 98.0 wt.-% or more 99.0 wt.-% or more 99.2 wt.-% or more or99.5 wt.-% or more of polyisobutylene
II) 0 to 3.0 wt.-%, 0 to 2.5 wt.-%, 0 to 1.0 wt.-% or0 to 0.40 wt.-% of salts of
• mono- or multivalent metal ions or
• stearates and palmitates of multivalent metal ions or
• stearates and palmitates of calcium and zinc
III) 1 ppm to 5,000 ppm, from 1 ppm to 2,000 ppm from 5 to 1 ,000 ppm or from 5 to 500 ppm of at least one LCST compound.

60. Polyisobutylene composition, in particular (reshaped) polyisobutylene particles comprising 98.5 wt.-% or more, 98.8 wt.-% or more, 99.0 wt.-% or more 99.2 wt.-% or more 99,4 wt.-% or more or99.5 wt.-% or more of polyisobutylene and having an ash content measured according to ASTM D5667 of 0.2 wt.-% or less, 0.1 wt.-% or less, 0.08 wt.-% or less or0.05 wt.-% or less

, and further comprising 1 ppm to 5,000 ppm, from 1 ppm to 2,000 ppm from 5 to 1,000 ppm or from 5 to 500 ppm of a least one LCST compound.

61. Polyisobutylene composition, in particular (reshaped) polyisobutylene particles and polyisobutylene products comprising

I) 100 parts by weight of polyisobutylene (100 phr)

II) 0.0001 to 0.5, 0.0001 to 0.2, 0.0005 to 0.1, 0.0005 to 0.05 phr of a least one LCST compound and

III) no or from 0.0001 to 3.0, no or from 0.0001 to 2.0, no or from 0.0001 to 1 .0, no or from 0.0001 to 0.5, no or from 0.0001 to 0.3, no or from 0.0001 to 0.2 phr of

• salts of mono- or multivalent metal ions or

• stearates and palmitates of mono- or multivalent metal ions or

• calcium stearate, calcium palmitate, zinc stearate or zinc palmitate

and

IV) no or from 0.005 to 0.1 , from 0.008 to 0.05, orfrom 0.03 to 0.07 phr of antioxidants and

V) from 0.005 to 0.5, from 0.01 to 0.3, orfrom 0.05 to 0.2 phr of volatiles having a boiling point at standard pressure of 200CC or less.

62. Polyisobutylene composition according to claim 61, wherein the components I) to V) add up to 100.00501 to 104.100000 parts by weight, from 100.01 to 103.00 parts by weight, from 100.10 to 101.50 parts by weight, orfrom 100.10 to 100.80 parts by weight and together represent 99.80 to 100.00 wt.-%, 99.90 to 100.00 wt.-%, 99.95 to 100.00 wt.-% or99.97 to 100.00 wt.-% of the total weight of the polyisobutylene composition.

63. Polyisobutylene compositions according to claims 59 to 62, wherein the viscosity averaged molecular weight (Mv) of the polyisobutylene is in the range of from 100 to 3,000 kg/mol, in the range of from 250 to 3,000 kg/mol or in the range of from 100 to 2,000 kg/mol, in the range of from 200 to 2,000 kg/mol, in the range of from 350 to 1 ,800 kg/mol, in the range of from 400 to 1500 kg/mol, from 700 to 1300 kg/mol or the viscosity averaged molecular weight (Mv) of the polyisobutylene is in the range of from 2,001 to 3,000 kg/mol or in the range of from 3,001 to 10,000 kg/mol..

64. Polyisobutylene compositions according to claims 59 to 63, wherein the polydispersity of the polyisobutylenes is in the range of 3.0 to 5.5 as measured by the ratio of weight average molecular weight to number average molecular weight as determined by gel permeation chromatography.

65. Polyisobutylene compositions according to claims 59 to 64, wherein the polyisobutylene has a Mooney viscosity of at least 10 (ML 1 + 8 at 125°C, ASTM D 1646), from 10 to 80, from 20 to 80 or from 25 to 60 (ML 1 + 8 at 125°C, ASTM D 1646).

66. Use of the polyisobutylene particles, reshaped polyisobutylene particles or polyisobutylene compositions or the shaped articles according to claims 59to 65 for sealants, coatings, adhesives and roofings.

67. Sealants, adhesives, coatings and roofings made from or comprising polyisobutylene particles, reshaped polyisobutylene particles or polyisobutylene compositions or the shaped articles according to claims 59 to 65.