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(54) Title: A LIQUID LAUNDRY BOOSTER COMPRISING VISIBLE BEADS AND ALCOHOL ETHOXYLATE

(57) Abstract: A liquid laundry booster comprising: 0.001 to 10 wt.% beads having a diameter of 200 µm to 1500 µm, 0.05 to 5 wt.% network forming polymer and 1 to 30 wt.% alcohol ethoxylate.

A LIQUID LAUNDRY BOOSTER COMPRISING VISIBLE BEADS AND ALCOHOL ETHOXYLATE

Field of the Invention

5 The invention relates to liquid laundry boosters having visual beads.

Background of the Invention

10 Laundry boosters are used in the laundry process to deliver additional benefit agents such as fragrance, in addition to any detergent or fabric conditioner being used. Boosters allow consumers to tailor their experience during the laundry process. The consumer can select the benefit agent and the quantity of product to add. This prevents the tendency to over-dose products such as fabric conditioner in order to increase the delivery of benefit agents such as fragrances.

15 However, there is a need to improve the consumer experience of these products. One way in which this is provided is by suspending visible beads in the formulation. Polymers are required to suspend the beads, however careful selection of non-ionic surfactant is required, particularly when the composition is designed for use with a fabric conditioner composition to prevent
20 residue formation.

Summary of the Invention

25 It has been found that using an alcohol ethoxylate non-ionic surfactant prevents the formation of residues in the rinse compartment of a washing machine drawer.

Accordingly in a one aspect of the present invention is provided a liquid laundry booster composition, for use in the rinse stage of the laundry process comprising:

- 30
- a. 0.001 to 10 wt.% beads having a diameter of 200 μm to 1500 μm ;
 - b. 0.05 to 5 wt.% network forming polymer;
 - c. 1 to 30 wt.% alcohol ethoxylate; and
 - d. 0.1 to 20 wt.% perfume.

The invention further relates to a method of laundering fabric, wherein a composition as described herein is added to the rinse stage of the laundry process.

Detailed Description of the Invention

5 These and other aspects, features and advantages will become apparent to those of ordinary skill in the art from a reading of the following detailed description and the appended claims. For the avoidance of doubt, any feature of one aspect of the present invention may be utilised in any other aspect of the invention. The word "comprising" is intended to mean "including" but not necessarily "consisting of" or "composed of." In other words, the listed steps or options need
10 not be exhaustive. It is noted that the examples given in the description below are intended to clarify the invention and are not intended to limit the invention to those examples per se. Similarly, all percentages are weight/weight percentages unless otherwise indicated. Except in the operating and comparative examples, or where otherwise explicitly indicated, all numbers in this description indicating amounts of material or conditions of reaction, physical properties of
15 materials and/or use are to be understood as modified by the word "about". Numerical ranges expressed in the format "from x to y" are understood to include x and y. When for a specific feature multiple preferred ranges are described in the format "from x to y", it is understood that all ranges combining the different endpoints are also contemplated.

20 The compositions described herein comprise beads having a diameter of 50 μm to 2000 μm . The compositions comprise 0.001 to 10 wt.% beads by weight of the composition, preferably 0.005 to 5 wt.% beads and more preferably 0.01 to 2 wt.% beads by weight of the composition.

The beads may be any suitable shape. The diameter of the beads is measured as the
25 maximum linear dimension. The beads preferably have a diameter of 100 μm to 1500 μm , more preferably 200 μm to 1250 μm , and most preferably 400 μm to 1000 μm .

The beads may be made of any suitable material. The beads preferably comprise a structure formed from inorganic material, plant based solids or waxes, polymeric material or a
30 combination thereof.

Inorganic materials include materials such as such clays (e.g. bentonite), silicates (e.g. sodium or potassium silicates), carbonates (e.g. calcium carbonate), or materials comprising calcium,

phosphorus, potassium, sodium, chloride, magnesium, iron or zinc. Preferably inorganic materials are selected from clays, silicates, carbonates and combinations thereof.

Plant based solids are taken from the hard materials found in plants, for example the stones or pits in fruit or the shells of nuts. Plant based solids are preferably selected from olive pit, almond shell, peach stones, pistachio shell, avocado shell, apricot stone, argan shell, walnut shell, jojoba seeds, oats, bamboo, loofah, poppy seeds, strawberry seeds, raspberry seeds, blackberry seeds and combinations thereof. The plant solids may be ground to a suitable particle size. Plant based waxes such as beads formed from hydrogenated plant oils e.g. hydrogenated jojoba oil or hydrogenated castor oil, examples of suitable beads formed from plant based waxes are available from Vantage.

Polymeric materials include any polymers which can form beads having a diameter of 50 μm to 2000 μm . Preferably the polymer is a polysaccharide. The polysaccharide is preferably selected from cellulose (including microcrystalline cellulose, carboxymethyl cellulose and other cellulose ethers, hydroxyethyl and hydroxypropyl cellulose), guar, agar, carrageenan, alginates, pectins, hemicellulose, alginate, locust bean gum, starch, gelatin, xanthan gum and combinations thereof. More preferably the polysaccharide comprises cellulose (including microcrystalline cellulose, carboxymethyl cellulose and other cellulose ethers, hydroxyethyl and hydroxypropyl cellulose) and combinations thereof. Preferably the beads comprise 10 to 100 wt.% polysaccharide by weight of the bead, more preferably 15 to 95 wt.% polysaccharide by weight of the bead most preferably 25 to 90 wt.% polysaccharide by weight of the beads.

The beads may further comprise sugar, sugar alcohol or combinations thereof in addition to the inorganic material, plant based solids or waxes, or polymeric material. Suitable sugars or sugar alcohols include lactose, sucrose, dextrose, mannitol, xylitol, sorbitol, isomalt, lactitol, erythritol and combinations thereof. The beads preferably comprise 5 to 80 wt.% sugar, sugar alcohol or combinations thereof by weight of the beads, more preferably 10 to 70 wt.%, most preferably 15 to 60 wt.% sugar, sugar alcohol or combinations thereof.

The beads may preferably comprise optical enhancers, preferably pearlisers, pigments, dyes and combinations thereof. The optical enhancers should be non-substantive to fabrics and are present to enhance the aesthetics of the beads. These are particularly preferred for mineral or polymeric beads.

The beads may consist essentially of inorganic material, plant based solids or waxes, or a polymeric material optionally with minor quantities of optical enhancers further present. Alternatively, the beads may consist essentially of inorganic material, plant based solids or waxes, or a polymeric material in combination with sugar and/or sugar alcohol, optionally with
5 minor quantities of optical enhancers further present.

Alternatively, when the beads are mineral or polymeric based beads, they may comprise benefit agents, preferred benefit agents are selected from: perfumes, perfume microcapsules, oils, silicone, plant extracts, fabric care ingredients, vitamins, enzymes, shading dyes, antibacterial
10 agents, malodor reduction or prevention agents, fabric softening agents, insect replants, shading or hueing dyes, fabric dyes, soil-release agents, sunscreens, and combinations thereof. Preferably the beads comprise hydrophobic benefit agents, such as perfumes. When present, the beads preferably comprise 0.01 to 50 wt.% benefit agent by weight of the beads, more preferably 1 to 40 wt.% benefit agent, even more preferably 4 to 30 wt.% benefit agent and
15 most preferably 6 to 25 wt.% benefit agent by weight of the beads.

The beads may be prepared by mixing all the raw components together, preferably in a powder form. Water and/or another aqueous component is then added to the powders, and mixed to form a bulk that is further granulated. The wet granulates are dried to reduce the water content.
20 The bulk may be dried using conventional drying procedure such as air drying, spray drying, belt drying, freeze drying, drum drying or flash drying.

Examples of commercially available polysaccharide beads are Unispheres® ex. Givaudan.

25 The compositions described herein comprise network forming polymer. A network forming polymer is a cross-linked polymer. The polymer may be cross-linked prior to addition to the composition or may form cross-linking in the formulation or may be cross-linked prior to addition to the composition and further cross linking occurs in the formulation. Preferably the polymer is cross-linked before addition to the composition, further cross-linking may occur in the
30 composition. Preferably the network polymer is anionic.

The compositions described herein preferably comprise 0.05 to 5 wt.% network forming polymer by weight of the composition, more preferably 0.01 to 2 wt.% network forming polymer by weight of the composition.

The network forming polymer may be synthetic, natural or a modified natural polymer (for example, micro fibrillated cellulose, which may be derived from a bacterial, fungal, or plant origin, including from wood).

5 Synthetic network forming polymers may comprise polycarboxylates, polyacrylates, hydrophobically modified ethoxylated urethanes, hydrophobically modified non-ionic polyols, acrylic polymers, polyamino acids, polyuronic acids, polyvinyl sulfonic acids, polyalkene dicarboxylic acids and mixtures thereof. Polycarboxylate polymers may comprise a polyacrylate, polymethacrylate or mixtures thereof. Polyacrylates may for example comprise a copolymer of
10 unsaturated mono- or di-carbonic acid and C1-C30 alkyl ester of the (meth)acrylic acid. The term acrylic polymer is understood to mean homopolymers or copolymers that comprise at least acrylic acid or methacrylic acid as a monomer. Polyuronic acids include homopolymers or copolymers of these sugar acids. The term polyvinyl sulfonic acids includes homopolymers or copolymers that comprise vinyl sulfonic acid as a monomer. In the context of this invention, the
15 term polyalkene dicarboxylic acids includes for example homopolymers or copolymers with maleic acid or fumaric acid as a monomer. Suitable polymers are sold under the trade names Acusol ex. Dow and Carbopol Aqua 30 or Carbopol aqua CC. ex. Lubrizol.

Natural network forming polymers are preferably polysaccharides. Suitable polysaccharides are
20 selected from: pectin, alginate, arabinogalactan (gum Arabic), carrageenan, gellan gum, locust bean gum xanthan gum, guar gum and mixtures thereof. Modified natural polymers are preferably modified polysaccharides. Suitable modified polysaccharides may comprise hydroxyethyl cellulose, hydrophobically modified hydroxyethyl cellulose, carboxymethyl cellulose and mixtures thereof.

25 Preferably the network forming polymer is selected from polyacrylates, polysaccharides, polysaccharide derivatives, or combinations thereof. Preferably the network forming polymer comprises hydrophobic modification.

30 Particularly preferred polyacrylates include HASE polymers selected from crosslinked copolymers that are prepared by the polymerization of a monomer mixture comprising (i) from 5 to 85 percent, more preferably from 25 to 70 percent, and most preferably from 35 to 65 percent (by weight based on the total weight of the monomer mixture) of nonionic monomers; (ii) from 5 to 85 percent, more preferably from 25 to 70 percent, and most preferably from 35 to 65 percent
35 (by weight based on the total weight of the monomer mixture) of anionic or anionisable

monomers; (iii) from 0.5 to 35 percent, more preferably from 1 to 25 percent (by weight based on the total weight of the monomer mixture) of hydrophobic monomers having an ethylenically unsaturated section (for addition polymerization with the other monomers in the mixture) and a hydrophobic section, and (iv) optionally, from 0.001 to 5 percent, preferably from 0.01 to 0.1 percent (by weight based on the total weight of the monomer mixture) of polyethylenically unsaturated copolymerizable monomers effective for crosslinking.

The nonionic monomers (i) are suitably selected from C₁-C₈ alkyl and C₂-C₈ hydroxyalkyl esters of acrylic and methacrylic acid. Preferred are ethyl acrylate, methyl acrylate, and butyl acrylate.

The anionic or anionisable monomers (ii) are suitably selected from acrylic acid, methacrylic acid, crotonic acid, 2-acrylamido-2-methyl-1-propanesulfonic acid, sodium vinyl sulfonate, itaconic acid, fumaric acid, maleic acid, monomethyl itaconate, monomethyl fumarate, monobutyl fumarate, and maleic anhydride. Preferred are acrylic acid and methacrylic acid.

In one suitable type of hydrophobic monomer (iii), the hydrophobic section is constituted by a homopolymeric, random copolymeric or block copolymeric chain formed from repeating units selected from C₁-C₂₂ alkyl acrylates, C₁-C₂₂ alkyl methacrylates, methacrylic acid, acrylic acid or combinations thereof. Examples of such units include methyl methacrylate, ethyl methacrylate, butyl methacrylate, ethylhexyl methacrylate, stearyl methacrylate and mixtures thereof. One of the units at an end of the chain will remain available as an ethylenically unsaturated section for addition polymerisation with the other monomers in the mixture.

Hydrophobic monomers of this type are usually referred to as "macromonomers" and may be prepared by catalytic chain transfer (CCT) procedures utilizing catalysts effective to achieve CCT such as the cobalt porphyrins and the cobaloximes. Macromonomers may advantageously have a number average molecular weight (M_n as determined by liquid permeation chromatography) ranging from about 200 to about 50,000, preferably from about 400 to about 10,000, and optimally from about 500 to about 3,000. Preferred examples of macromonomers include poly(methylmethacrylate)/poly(methacrylic acid), poly(methylmethacrylate), poly(butylmethacrylate), poly(ethylhexylmethacrylate) and combinations thereof. Another suitable type of hydrophobic monomer (iii) includes a polyoxyalkylene section between the ethylenically unsaturated section and the hydrophobic section. Hydrophobic monomers of this type are sometimes referred to as "surfmers" and may typically be prepared by the acid catalyzed condensation of commercially available nonionic polyoxyalkylene surfactant alcohols

with acrylic, methacrylic, crotonic, maleic, fumaric, itaconic or aconitic acid. Preferred examples of surfmers include C8-C30 alkylated polyethoxylated (meth) acrylates (i.e. methacrylates and/or acrylates) in which the polyethoxylated portion comprises about 5 to about 100, preferably about 10 to about 80, and more preferably about 15 to about 60 ethylene oxide (EO) units, such as C18H37(EO)20 (meth)acrylate and C12H25(EO)23 methacrylate.

The crosslinking comonomers (iv) are suitably selected from diallylphthalate, divinylbenzene, allyl methacrylate, trimethylol propane triacrylate, ethylene glycol diacrylate or dimethacrylate; 1,6-hexanediol diacrylate or dimethacrylate; and diallyl benzene.

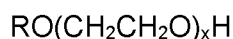
Particularly preferred polysaccharides include cellulose and xanthan gum. Particularly preferred polysaccharide derivatives include hydroxyethyl cellulose, hydrophobically modified hydroxyethyl cellulose, carboxymethyl cellulose and mixtures thereof.

The network forming polymer preferably has a weight average molecular weight (Mw) of about 30,000 g/mol to about 10,000,000 g/mol, for example about 30,000 to about 500,000 g/mol, more typically 50,000 g/mol to 500,000 g/mol. Molecular weight can be determined by physical properties such as intrinsic viscosity or by spectrophotometric analysis such as light scattering.

The composition may comprise a single species of network forming polymer or may comprise a mixture of different polymers to provide optimal performance.

The compositions described herein comprise alcohol ethoxylate. The compositions preferably comprise 1 to 30 wt.% alcohol ethoxylate by weight of the composition, more preferably 2 to 25 wt.% alcohol ethoxylate, most preferably 4 to 20 wt.% alcohol ethoxylate.

Alcohol ethoxylates have a formula:



R represents the fatty alcohol chain. Preferably R is saturated. Preferably R = C₈ to C₂₄ fatty alcohol, more preferably R = C₁₀ to C₂₂ fatty alcohol, even more preferably R = C₁₂ to C₂₀ fatty alcohol and most preferably R = C₁₆ to C₁₈ fatty alcohol. In other words, preferably the alcohol ethoxylate comprises a C₈ to C₂₄ fatty alcohol, more preferably a C₁₀ to C₂₂ fatty alcohol and most preferably a R = C₁₆ to C₁₈ fatty alcohol.

x represents the degree of ethoxylation. Preferably x is 5 to 100, more preferably 10 to 80, even more preferably 12 to 60 and most preferably 15 to 40. In other words, preferably the alcohol ethoxylate comprises 5 to 100 ethoxylate groups, more preferably 12 to 60 ethoxylate groups and most preferably 15 to 40 ethoxylate groups.

5 Most preferably the alcohol ethoxylate comprises R = C₁₆ to C₁₈ fatty alcohol and x = 25. Suitable commercially available materials are available under the trade name Lutensol AT25 ex. BASF.

10 The alcohol ethoxylate prevents residues in the rinse drawer when the composition is used in conjunction with a fabric conditioner.

The compositions described herein preferably comprise ethoxylated triglyceride. The compositions preferably comprise 1 to 30 wt.% ethoxylated triglyceride, more preferably 2 to 25
15 wt.% ethoxylated triglyceride, most preferably 4 to 20 wt.% ethoxylated triglyceride.

The triglyceride may be any suitable triglyceride. Preferably the triglyceride is fully saturated. Full saturation may be naturally occurring, or may be achieved by hydrogenation. Preferably the triglyceride chains comprise alcohol groups. Preferred sources of triglyceride are plant oils and
20 combinations thereof. Preferably the triglycerides are sourced from the following oils: almond, argan, babassu, borage, camelina, canola, castor, chia, cherry, coconut, corn, cotton, coffee, Cuphea Viscosissima, flax (linseed), grape, hemp, hepar, jatropha, jojoba, Lesquerella Fendleri, Moringa Oleifera, macadamia, mango, mustard, neem, olive, palm, palm kernal, perilla, rapeseed, safflower, sesame, shea, stillingia, soybean, sunflower, tonka bean, tung and
25 combinations thereof.

The ethoxylated triglyceride preferably comprises 6 to 100 moles of ethoxylation, more preferably 12 to 80, and even more preferably 20 to 60 moles of ethoxylation. Most preferably the ethoxylated triglyceride comprises about 40 moles of ethoxylation (i.e. 35 to 45 moles of
30 ethoxylation).

Most preferably the ethoxylated triglyceride comprises PEG-40 hydrogenated castor oil. The ethoxylated triglyceride enhances the transparency of the formulations. Preferably the ratio of perfume to ethoxylated triglyceride is 1:1 to 1:15, more preferably 1:2 to 1:10.

Preferably the compositions described herein comprise both ethoxylated triglyceride and alcohol ethoxylate. The ratio of ethoxylated triglyceride to alcohol ethoxylate is preferably 1:2 to 2:1, more preferably 2:3 to 3:2.

5 Preferably the composition comprises perfume. The compositions preferably comprise 0.1 to 20 wt.% perfume by weight of the composition, more preferably 0.5 to 10 wt.% perfume by weight of the composition. Many suitable examples of perfumes are provided in the CTFA (Cosmetic, Toiletry and Fragrance Association) 1992 International Buyers Guide, published by CFTA Publications and OPD 1993 Chemicals Buyers Directory 80th Annual Edition, published by
10 Schnell Publishing Co.

It is commonplace for a plurality of perfume components to be present in a free oil perfume composition. In the compositions for use in the present invention, preferably it is envisaged that there will be three or more, preferably four or more, more preferably five or more, most
15 preferably six or more.

The compositions described herein are preferably transparent. For the purposes of the present invention, transparency is measured by light transmission. Preferably the formulation has a light transmission of 60 to 100%, more preferably 60 to 100%, even more preferably 70 to 100% and
20 most preferably 80 to 90%. The light transmission is measured at 25°C and can suitably be measured using a Turbiscan®LAB ex. Formulation Scientific Instruments, with a 880 nm wavelength and a glass vials having a diameter of 25 mm and height of 55mm. A transparent formulation may comprise dyes to colour the formulation, such dyes preferably do not affect the transparency of the formulation.

25 The compositions described herein preferably have a pH of 4 to 9. The composition may comprise pH adjusters to reach the desired pH. A suitable acid pH adjuster is Hydrochloric acid. A suitable base pH adjuster is triethanolamine.

30 The compositions described herein preferably comprise benefit agents. Benefit agents are known to the person skilled in the art to deliver benefits to fabric. Such ingredient include: perfumes, perfume carriers, antibacterial agents, malodor reduction or prevention agents, fabric softening agents, insect replants, shading or hueing dyes, fabric dyes, hydrotropes, anti-redeposition agents, soil-release agents, anti-wrinkle agents, anti-oxidants, sunscreens, anti-
35 static agents, sequestrants and ironing aids.

The compositions described herein may preferably further comprise preservatives. Suitable preservatives include isothiazolinones, organic acids, alcohols or combinations thereof. Specifically the preservative may preferably be selected from: benzisothiazolinone (BIT), Methylisothiazolinone (MIT), lactic acid, citric acid, sodium benzoate, sodium citrate, itaconic acid, potassium sorbate, anisic acid, phenoxyethanol, propanediol and combinations thereof. Some preservatives may require the presence of pH adjusters to maintain the optimal pH.

The compositions described herein may preferably further comprise dyes for colouring the compositions. Such dyes are intended to colour the composition, but not be substantive to fabrics. Such dyes are available under the Liquitint trade name ex. Milliken.

The compositions described herein may preferably comprise a sequestrant. It is understood that the sequestrant prevents yellowing of the compositions. This is particularly important for transparent formulations. Examples of suitable sequestrants are available under the trade names Dequest 2010 or 2066.

The compositions described herein are booster compositions. They are intended to provide additional benefits to the laundry process, not to provide cleaning or conditioning. Accordingly, the compositions preferably comprise 0 to 7 wt.% cationic surfactant, anionic surfactant or mixtures thereof, by weight of the composition. More preferably the compositions comprise 0 to 4 wt.% cationic surfactant, anionic surfactant or mixtures thereof, by weight of the composition, even more preferably 0 to 2 wt.% and most preferably 0 to 1 wt.% cationic surfactant, anionic surfactant or mixtures thereof, by weight of the composition.

The compositions of the present invention preferably comprise water. Preferably the compositions comprise more than 50 wt.% water by weight of the composition, more preferably at least 60 wt.% water by weight of the composition. A suitable upper limit is preferably 98 wt.% of the composition.

The compositions described herein may be produced by any suitable method. Preferably when perfume and ethoxylated triglyceride are both present, these ingredients are pre-mixed prior to addition to the main mix. Preferably the water for the main mix is heated to 30-70°C prior to the addition of any further ingredients, more preferably 40-60°C.

The compositions described herein are used in the rinse stage. The compositions may be used in conjunction with a fabric conditioner or may be used on their own. Preferably the composition is used with a fabric conditioner. In one aspect of the present invention is provided a method wherein the compositions described herein are added in the rinse stage of the laundry process.

- 5 Preferably the compositions are added to the rinse stage of the laundry process in addition to a fabric conditioner. In one aspect of the present invention is provided a use of the compositions described herein to provide fragrance in the rinse stage of the laundry process.

Examples

10

Table 1: Example compositions

Ingredient	wt.% inclusion	
	1	A
Network forming polymer ¹	0.5	0.5
Alcohol ethoxylate ²	8	0
Ethoxylated triglyceride ³	8	8
Perfume	3.13	3.13
Minors (preservatives, etc.)	<1	<1
Demin water	To 100	To 100

Network forming polymer ¹ - Acusol millennium ex. Dow

Alcohol ethoxylate ² – Lutensol AT25 ex. BASF

- 15 Ethoxylated triglyceride ³ - PEG 40 hydrogenated castor oil

The composition was prepared by pre-mixing the perfume and ethoxylated triglyceride. The water was then heated to 50°C, the polymers, preservatives, and alcohol ethoxylate were added consecutively with stirring, followed by the premix. The pH was checked and adjusted to

20 pH 7-8 if necessary. The mixture was then cooled to room temperature.

The residues from each composition were tested in an automatic front-loading washing machine. 35 ml of fabric conditioner was poured into the rinse compartment of the washing machine drawer. 23 ml of the example composition was poured on top of the fabric conditioner.

25 A 60-minute quick wash was run. The process was repeated; a total of two cycles were carried out. After the two wash the residues were assessed by visual assessment.

Example composition	Visual assessment
1	No residues
A	Residues

The presence of alcohol ethoxylate reduced the residues.

Claims

1. A liquid laundry booster composition for use in the rinse stage of the laundry process, comprising:
 - a. 0.001 to 10 wt.% beads by weight of the composition having a diameter of 200 μm to 1500 μm ;
 - b. 0.05 to 5 wt.% by weight of the composition network forming polymer;
 - c. 1 to 30 wt.% alcohol ethoxylate by weight of the composition; and
 - d. 0.1 to 20 wt.% perfume by weight of the composition.
2. A composition according to claim 1, wherein the network forming polymer is hydrophobically modified.
3. A composition according to any preceding claim, wherein the network forming polymer is selected from polyacrylates, polysaccharides, polysaccharide derivatives, or combinations thereof.
4. A composition according to any preceding claim wherein the alcohol ethoxylate comprises a C₈ to C₂₄ fatty alcohol.
5. A composition according to any preceding claim, wherein the alcohol ethoxylate comprises 5 to 100 ethoxylate groups.
6. A composition according to any preceding claim, wherein the beads comprise a structure formed from inorganic material, plant based solids, polymeric material, or a combination thereof.
7. A composition according to any preceding claim, wherein the beads comprise a structure formed from polymeric material.
8. A composition according to any preceding claim, wherein the beads further comprise sugar, sugar alcohol or combinations.

9. A composition according to any preceding claim, wherein the beads further comprise optical enhancers selected from pearlisers, pigments, dyes and combinations thereof.
10. A composition according to any preceding claim, wherein the composition further comprises ethoxylated triglyceride.
11. A composition according to any preceding claim, wherein the composition is transparent, having a light transmission of 60 to 100%.
12. A composition according to any preceding claim, wherein the composition has a pH of 4 to 9.
13. A method of laundering fabric, wherein a composition according to any preceding claim is added to the rinse stage of the laundry process.
14. A method according to claim 13, wherein the composition is added to the rinse stage in addition to a fabric conditioner.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2024/065668

A. CLASSIFICATION OF SUBJECT MATTER					
INV.	C11D1/72	C11D3/37	C11D3/50	C11D11/00	C11D17/00
ADD.					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols) C11D					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
X	US 2018/265825 A1 (PARK JUNG HYUN [US]) 20 September 2018 (2018-09-20)				1-9, 11, 12
Y	paragraphs [0001], [0004] - [0021], [0047], [0214], [0216], [0229] - [0241]; claims 1-3, 6, 39; examples -----				10, 13, 14
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* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance;; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance;; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family					
Date of the actual completion of the international search 21 August 2024			Date of mailing of the international search report 02/09/2024		
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016			Authorized officer Marttin, Emmeline		

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