

The Global Market for Biobased and Natural Microbeads to 2027

<https://marketpublishers.com/r/GA19EA12F4C7EN.html>

Date: October 2022

Pages: 100

Price: US\$ 875.00 (Single User License)

ID: GA19EA12F4C7EN

Abstracts

Plastic microbeads are a multi-billion dollar market, with applications in markets ranging from cosmetics to oil & gas. However, their use is limited in some applications, and regulatory curbs regarding use are likely to increase.

Replacement of plastic microbeads with biodegradable and non-toxic alternatives is increasingly important and the market will grow to meet both regulatory demands and increased use of microbeads in healthcare (e.g pharmaceuticals and drug delivery), food and beverages), paints and coatings, and cosmetics and personal care sectors.

Microplastics can be separated into primary and secondary microplastics. Primary microplastics are mostly thermoset and thermoplast plastic materials that have been added to products to fulfil a certain function. For example, these synthetic non-degradable polymers are used in personal care and cosmetics for exfoliation, film formation, sorbents for delivering active ingredients, skin conditioning etc.. While some of these microbeads are clearly visible, others are in the micro- or nanometre range.

Personal care and cosmetic products since the 1990s have been increasingly formulated to include microbeads to improve their abrasive and other qualities. Many companies have curtailed their use or pivoted to natural alternatives, but it still represents a sizeable global market.

Secondary microplastics are formed by the fragmentation of macroplastics (>5 mm) by processes such as weathering of plastic litter and paint layers, as well as wear of car tyres and are the main focus of environmental concerns. However, primary microplastics also raise issues and are a target for regulation. Therefore the developments of biobased and natural alternatives has grown in recent years.

This report covers primary microplastics based on petroleum-based polymers and biobased and natural alternatives in the following markets:

Personal care.

Cosmetics.

Agriculture and horticulture.

Paints and coatings.

Oil and gas.

Medical and pharma.

Industrial abrasives.

Commercially available biodegradable plastics and natural materials used as primary microplastic alternatives covered include:

natural hard materials

starch based materials

bacteria based materials (e.g. PHA)

soy based materials

cellulose based materials

lignin based materials

natural fibers (e.g. bamboo, jute, sisal, etc.)

Data presented includes:

Markets and applications for primary microplastics including global production in tonnes 2017-2027, applications, types of microplastics added.

Markets and applications for biobased and natural microplastics alternative materials including types, applications, global production and suppliers.

Profiles of 33 producers. Companies profiled include Asahi Kasei, Calyxia, Daicel, Daito Kasei Kogyo Co., JNC, Naturbeads and Rengo.

Contents

1 REPORT METHODOLOGY

2 MICROPLASTICS ADDED TO PRODUCTS MARKET

2.1 Microplastics added to products

- 2.1.1 Classification
- 2.1.2 Function and applications

2.2 Global market size

- 2.2.1 Global market 2021, applications
 - 2.2.1.1 Personal care
 - 2.2.1.2 Cosmetics
 - 2.2.1.3 Agriculture and horticulture
 - 2.2.1.4 Paints & coatings
 - 2.2.1.5 Soap, detergents and maintenance products
 - 2.2.1.6 Oil and gas
 - 2.2.1.7 Medical products
- 2.2.2 Global market 2021, by sector (volume in tonnes)
- 2.2.3 Global market 2021, by region (volume in tonnes)
- 2.2.4 Global market 2017-2021, by sector (volume in tonnes)
- 2.2.5 Global market 2022-2027, by sector (estimated volume in tonnes)
- 2.2.6 Global market 2017-2027, by sector (estimated revenues)
- 2.2.7 Global market 2017-2021, by region (volume in tonnes)

3 MICROPLASTIC ALTERNATIVES-CELLULOSE AND OTHER NATURAL MICROBEADS MARKET

3.1 Use as an alternative to microplastics

3.2 Likelihood of market penetration of natural microplastic alternatives

3.3 Natural hard materials

3.4 Natural polymers

- 3.4.1 Polysaccharides
 - 3.4.1.1 Starch
 - 3.4.1.1.1 Applications
 - 3.4.1.1.2 Companies
 - 3.4.1.2 Cellulose
 - 3.4.1.2.1 Microcrystalline cellulose (MCC)
 - 3.4.1.2.1.1 Applications

- 3.4.1.2.1.2 Companies
- 3.4.1.2.2 Regenerated cellulose microspheres
 - 3.4.1.2.2.1 Applications
 - 3.4.1.2.2.2 Companies
- 3.4.1.2.3 Cellulose nanocrystals
 - 3.4.1.2.3.1 Applications
 - 3.4.1.2.3.2 Companies
- 3.4.1.2.4 Bacterial nanocellulose (BNC)
 - 3.4.1.2.4.1 Companies
- 3.4.1.3 Chitin
 - 3.4.1.3.1 Description
 - 3.4.1.3.2 Applications
 - 3.4.1.3.3 Companies
- 3.4.2 Proteins
 - 3.4.2.1 Collagen/Gelatin
 - 3.4.2.1.1 Applications
 - 3.4.2.2 Casein
- 3.4.3 Polyesters
 - 3.4.3.1 Polyhydroxyalkanoates
 - 3.4.3.1.1 Applications
 - 3.4.3.1.2 Companies
 - 3.4.3.2 Polylactic acid
 - 3.4.3.2.1 Applications
 - 3.4.3.2.2 Companies
- 3.4.4 Other natural polymers
 - 3.4.4.1 Lignin
 - 3.4.4.1.1 Description
 - 3.4.4.1.2 Applications
 - 3.4.4.1.3 Companies
- 3.5 Global market size
 - 3.5.1 Global market 2017-2027, for alternative and natural microbeads (volume in tonnes)

4 PRODUCER PROFILES 62 (33 COMPANY PROFILES)

5 REFERENCES

List Of Tables

LIST OF TABLES

- Table 1. Summary of functions and applications for microplastics.
- Table 2. Personal care products containing primary microplastics.
- Table 3. Agriculture and horticulture products containing microplastics.
- Table 4. Soaps, detergents and maintenance products containing microplastics.
- Table 5. Example microsphere products in drug delivery.
- Table 6. Medical products containing microplastics.
- Table 7. Global market for primary microparticles 2017-2021, by sector, tonnes.
- Table 8. Global market for primary microparticles 2022-2027, by sector, tonnes.
- Table 9. Global market 2017-2027, by sector (estimated revenues, millions USD).
- Table 10. Global market for primary microparticles 2017-2021, by region, tonnes.
- Table 11. Biodegradable polymers.
- Table 12. Likelihood of market penetration of natural microplastic alternatives.
- Table 13. Companies developing starch microspheres/microbeads.
- Table 14. Companies developing microcrystalline cellulose (MCC) spheres/beads.
- Table 15. Companies developing cellulose microbeads.
- Table 16. CNC properties.
- Table 17. Applications of cellulose nanocrystals (NCC).
- Table 18. Companies developing cellulose nanocrystal microbeads.
- Table 19. Cellulose nanocrystal production capacities and production process, by producer.
- Table 20. Applications of bacterial nanocellulose (BNC).
- Table 21. Companies developing bacterial nanocellulose microbeads.
- Table 22. Companies developing chitin microspheres/microbeads.
- Table 23. Types of PHAs and properties.
- Table 24. Polyhydroxyalkanoates (PHA) producers.
- Table 25. Companies developing PHA for microbeads.
- Table 26. PLA producers and production capacities.
- Table 27. Technical lignin types and applications.
- Table 28. Properties of lignins and their applications.
- Table 29. Production capacities of technical lignin producers.
- Table 30. Production capacities of biorefinery lignin producers.
- Table 31. Companies developing lignin for microbeads (current or potential applications).
- Table 32. Lactips plastic pellets.

List Of Figures

LIST OF FIGURES

Figure 1. Typical sources of primary microplastics.

Figure 2. Total quantity of microplastics present in personal care products 2021 (tonnes), by scale.

Figure 3. Toothpaste incorporating microbeads.

Figure 4. Total quantity of microplastics present in cosmetics 2021 (tonnes), by scale.

Figure 5. Total quantity of microplastics present in agriculture and horticulture 2021 (tonnes), by scale.

Figure 6. Total quantity of microplastics present in paints and coatings 2021 (tonnes), by scale.

Figure 7. Total quantity of microplastics present in Soaps, detergents and maintenance products 2021 (tonnes), by scale.

Figure 8. Total quantity of microplastics present in oil and gas 2021 (tonnes), by scale.

Figure 9. Global market by sector, primary microparticles, tonnes.

Figure 10. Global market by region 2021, primary microparticles, tonnes.

Figure 11. Global market for primary microparticles 2017-2021, by sector, tonnes.

Figure 12. Global market for primary microparticles 2022-2027, by sector, tonnes.

Figure 13. Global market 2017-2027, by sector (estimated revenues, USD).

Figure 14. Global market for primary microparticles 2017-2021, by region, tonnes.

Figure 15. Bacterial nanocellulose shapes.

Figure 16. Global market 2017-2027, for biobased and natural microbeads (volume in tonnes).

Figure 17: CNC produced at Tech Futures' pilot plant; cloudy suspension (1 wt.%), gel-like (10 wt.%), flake-like crystals, and very fine powder. Product advantages include:

Figure 18: NCCTM Process.

Figure 19. Pressurized Hot Water Extraction.

Figure 20. BELLOCEA.

Figure 21. VIVAPUR MCC Spheres.

Figure 22. Viscopearl.

Figure 23. The Proesa Process.

I would like to order

Product name: The Global Market for Biobased and Natural Microbeads to 2027

Product link: <https://marketpublishers.com/r/GA19EA12F4C7EN.html>

Price: US\$ 875.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GA19EA12F4C7EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970