



**Λ MICROBEADS<sup>®</sup>**

Microbeads AS is a Norwegian company based upon the manufacturing of uniform shaped and monosized polymer particles.



# PERFECT PARTICLES

## – WHO NEEDS THEM?

Adding Microbeads particles in different industrial products, results in unique performance in a wide range of application areas.

The technology has brought interesting product areas further into commercial use. Only the mind is the limit when exploring new areas of applications. The unique technology will revolutionize the process industry and bring a new dimension to the products of the 21st century!

Controllable particle size, monosized particles and sophisticated chemical and physical properties, makes our products preferred additives in numerous applications available today.

Microbeads AS has exclusive rights to patented technology as well as the ownership of all patents related to our industrial applications.

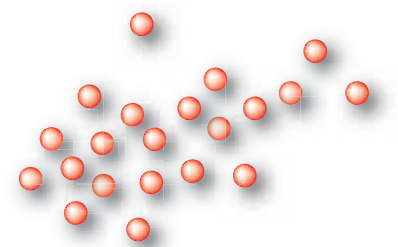
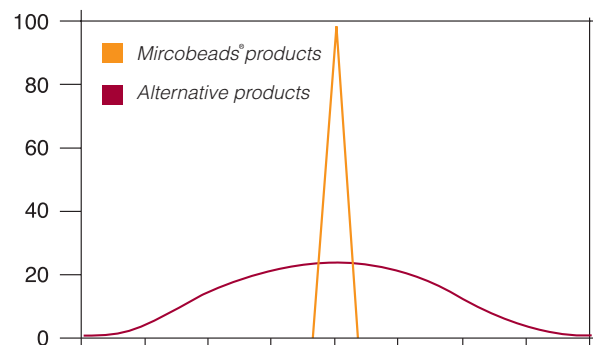
# LARGE SCALE PRODUCTION (READ LESS COSTS)

We provide particles with an exact controllable size in virtually all sizes from 0,5 micron to 2000 micron diameter, and in a variety of polymer materials.

Our large scale operation gives you cost benefits, compared to typical laboratory scale operations for similar products.

Microbeads supplies new innovative solutions on demand in close cooperation with the customer. The unique technology allows the monosized particles to be prepared to an exact molecular weight and crosslinking degree, or with a defined "pore volume" in porous particles.

Custom design is possible even in relatively small quantities. Feel free to put us to the test – any challenge is welcomed as a motivating and driving force.





# TOUGH, BUT CLEANABLE **BURNISH RESISTANT SUR**

Adding Microbeads products to coatings and paints, gives you a uniquely sleek membrane. The narrow size distribution ensures a smooth surface free of coarse particles. Special optical effects can be made with large monosized particles added to surfaces.

Spheromers® CA and Calibre® CA in coatings and paints offer optimum properties in terms of:

- Optical properties/effects
- Matting
- Abrasion resistance
- Resistance to high temperatures
- UV and weathering resistance
- Corrosion resistance
- Scratch resistance
- Flow characteristics
- Easy assembly
- "Flop" control of metallic coatings

**FACE**





COSMETICS  
CALIBRATION  
CUSTOM PRODUCTION

## COSMETICS

Caché® CA, cross-linked PMMA spheres with a diameter of 6 micron is specially designed for use as additives in cosmetics and toiletries. The mono-sized particle distribution gives cosmetic products (like powder and crèmes) unique flow properties and a soft touch feel.

The product is available in packaging units from 20 to 500 kg. Caché® CA is approved according to EU-directives for use as an additive in cosmetics and toiletries.

## CALIBRATION

Perfect spherical monosized polymer particles of cross-linked acrylates or cross-linked polystyrene have entered the market for calibration of instruments and machines. High quality spheres combined with very low prices have been a success in the market.

## ION EXCHANGE RESINS

Our products can be made for ion-exchange purposes when we do a custom polymer with functionality for the specific application. A monosized particle size distribution enables a minimal pressure drop over the filter and makes regeneration easy.

## CUSTOM PRODUCTION

Our unique production technology makes it possible to tailor-make almost all kind of polymer particles with different properties. We would be happy to give you an offer for specially designed polymer particles suitable for your application. Please contact us for further information.





# **A BREAK-THROUGH** IN PLASTIC PROCESSING

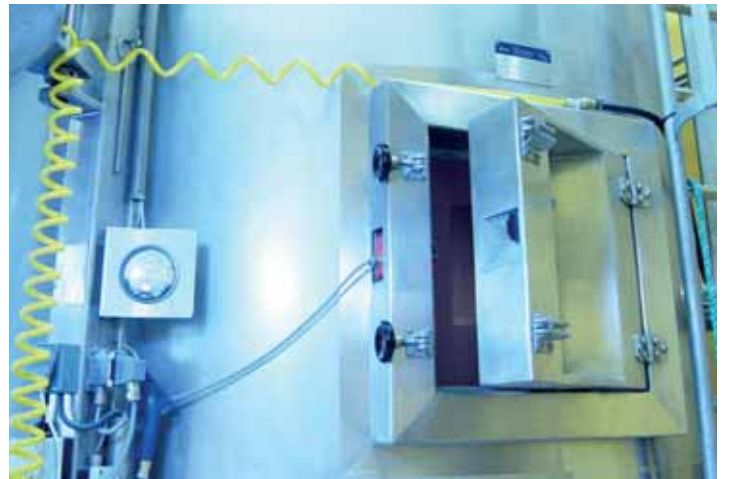
Dynoseeds® TS are polymer particles (spheres) made from styrene monomer, and are manufactured by a patented process able to tailor-make particles according to specific applications.

Dynoseeds® TS is best characterised from its high melt flow rate (MFR), its limited disturbance of the matrix GPPS's physical properties and its limited degradation during high temperature processing. Typical applications are dispersion of a wide range of additives and dyes, carrier for masterbatches and melt flow modifier. Dynoseeds® TS is available in sizes from 10 to 500 microns.

Rondure® PCS as additive in plastics, is cross-linked polystyrene particles filled with a "slip" agent. Polyolefins require additives to perform properly.

The slow release additive systems makes the additive effect last much longer, which represents a break-through for the plastics processing industry.





## SPHEROMERS®

Spheromers® are highly monosized particles composed of acrylic and styrene polymers. The particles have a perfect spherical shape and a very smooth surface. They are used as additives in coatings including paint and plastics film to introduce new and improved abrasion resistance, mar resistance, matting, cleanability, special surface effects, corrosion resistance, flow characteristics and flop control of metallics. Using monosized particles as additives will enhance your paint into next level.

## CALIBRE®

Calibre® are highly monosized cross-linked particles composed of acrylic and styrene polymers. The particles have a perfect spherical shape and a very smooth surface. They are used as additives in niche applications within coatings including paint and plastics film to obtain unique properties with regard to special surface effects.

## ORB®

Orb® are specially designed monosized polymers for ion-exchange resins. These particles are characterized by the low pressure drop and easy regeneration in filter systems.



### RONDURE®

Rondure® are slow release additive systems for the coatings and plastics processing industry and oilfield based upon acrylic, resorcinol formaldehyde (RF) and styrenic polymers. The monosized polymer particles contain additives that slowly leaks out of the polymer matrix. A slow release effect will greatly enhance the durability, lead to a prolonged additive effect and have a favourable influence on the environment.

### DYNOSEEDS®

Dynoseeds® are thermoplastic or cross-linked polymer particles with controllable molecular weight and uniform particle size, composed of acrylic and styrene polymers for application in for instance coatings and plastics processing industry. Dynoseeds® is a transparent, highly stable resin and one of our product Dynoseeds® TS 140-51 is best characterized from its high melt flow index and uniform particle size distribution. Dynoseeds® can be used as a dispersion agent for insoluble and solid fillers, additives and pigments in the plastics processing industry to obtain higher efficiency and lower cost.

### CACHÉ®

Caché® are highly monosized particles composed of acrylic polymers. Extremely narrow particle size distribution, perfect spherical shape and smooth particle surface makes these particles perfect as additives in the cosmetics and toiletries industry.

### LYMEX®

Polymer particles coated with a metal layer demonstrate unique properties in electronic industries. We do also see advantages where you want the combination of light monosized particles combined with the functionality given by the metal surface.

*"This unique technology will revolutionize the process industry and bring a new dimension to the products of the 21st century."*

Microbeads AS manufactures  
monosized polymer particles with  
perfect spherical shape.

We offer:

- Innovative solutions
- A wide range of materials
- High competence
- New technology
- Industrial scale production

## CONTACT

Microbeads as

Visiting address: Vestvollveien 8A

P.O. Box 265, N-2021 Skedsmokorset

Norway

phone: +47 6483 5300

fax: +47 6483 5301

[www.micro-beads.com](http://www.micro-beads.com)

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