



**POLYPEARL™ ME**

SPHERICAL SILICON RESIN POWDER

**Effective high-performance additive**

**Plastics**

**Coatings**

Polypearl™ ME consists of three-dimensionally cross-linked siloxane molecules and methyl groups.

**The 3D molecule structure and the strong O-Si-O bonding make Polypearl ME inert and provide exceptional properties.**

The **organic-inorganic hybrid structure** combines the advantages of organic compounds with the advantages of inorganic compounds

Advantages  
**organic  
compounds**

- compatibility with organic substances
- elasticity
- haptics



Advantages  
**anorganic  
compounds**

- extreme chemical resistance
- extreme temperature resistance

 **FUNCTION**

**Antiblocking**

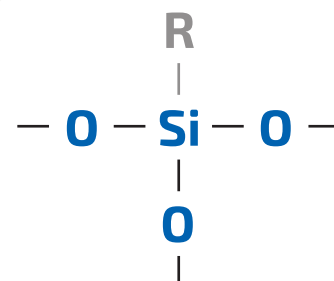
**Light diffusion**

**Haptics/Softfeel**

**Matting**

**Lubricant**

**Surface enhancer**



## ✓ ADVANTAGES & PROPERTIES

- narrow, homogeneous particle distribution
- excellent flow and dispersing properties
- surface-coated type ME 5.0 W especially for water-based system
- food approvals, regulatory and country listings
- outstanding optical properties / light diffusion
- tasteless and odourless
- highly efficient at low dosage levels
- low dielectric constant
- high temperature resistance
- very good chemical resistance
- solvent resistant / no swelling

antiblocking/spacer in coatings



antiblocking foils and films



homogeneous light diffusion in LED profiles



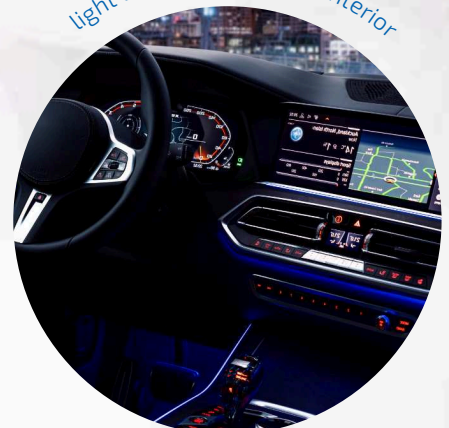
light scattering in streetlights



homogeneous light diffusion in automobile headlights



light design automobile interior



## Technical Data

**Basis:** polymethylsilsesquioxane (PMSQ)

**Appearance:** white, free-flowing powder

**Refractive index:** 1.42

**Density:** 1.32 g/cm<sup>3</sup>

**Melting point:** > 400°C

**CAS no.:** 68554-70-1

## Regulations

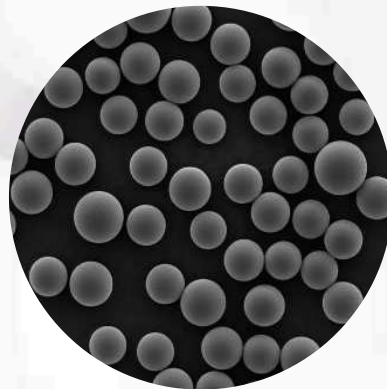
**Polypearl™ ME meets the requirements of all current regulations:**

- REACH
- FDA
- Food EU
- Country listings
- Cosmetics
- GSDSL
- and many more

## Grades & Sizes

ME <b>1.0</b>	1,0 µm
ME <b>2.0</b>	2,0 µm
ME <b>4.0</b>	4,0 µm
ME <b>5.0 W</b>	5,0 µm
ME <b>6.0</b>	6,0 µm
ME <b>8.0</b>	8,0 µm
ME <b>10.0</b>	10,0 µm

Homogeneous  
distribution for  
even performance

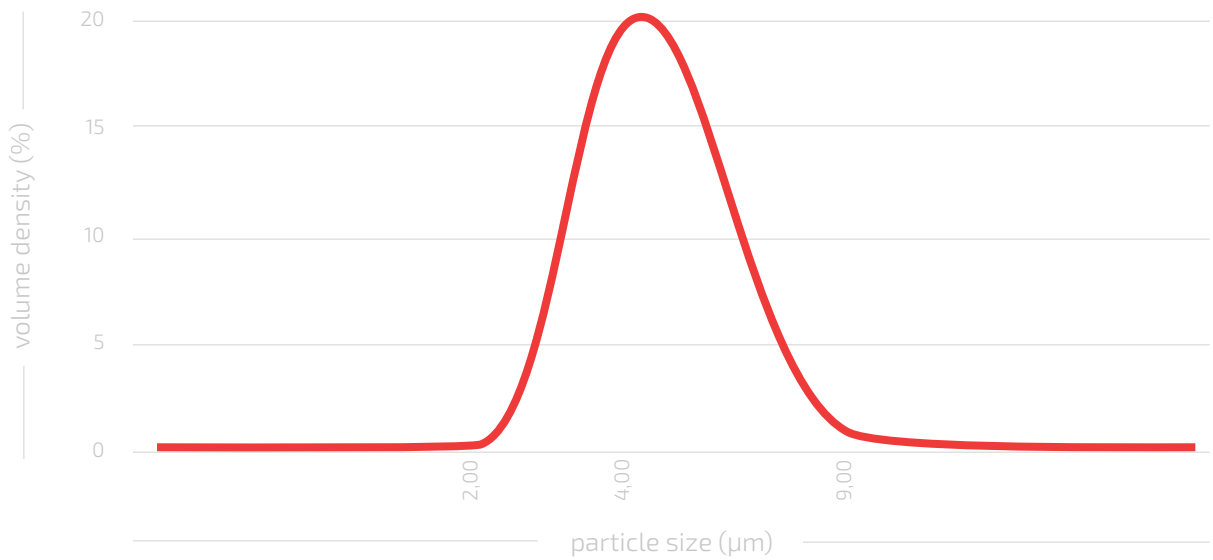


### RI 1.42

Polypearl™ ME has the lowest refractive index of all microspheres and provides excellent optical properties

### Typical particle distribution Polypearl ME 4.0

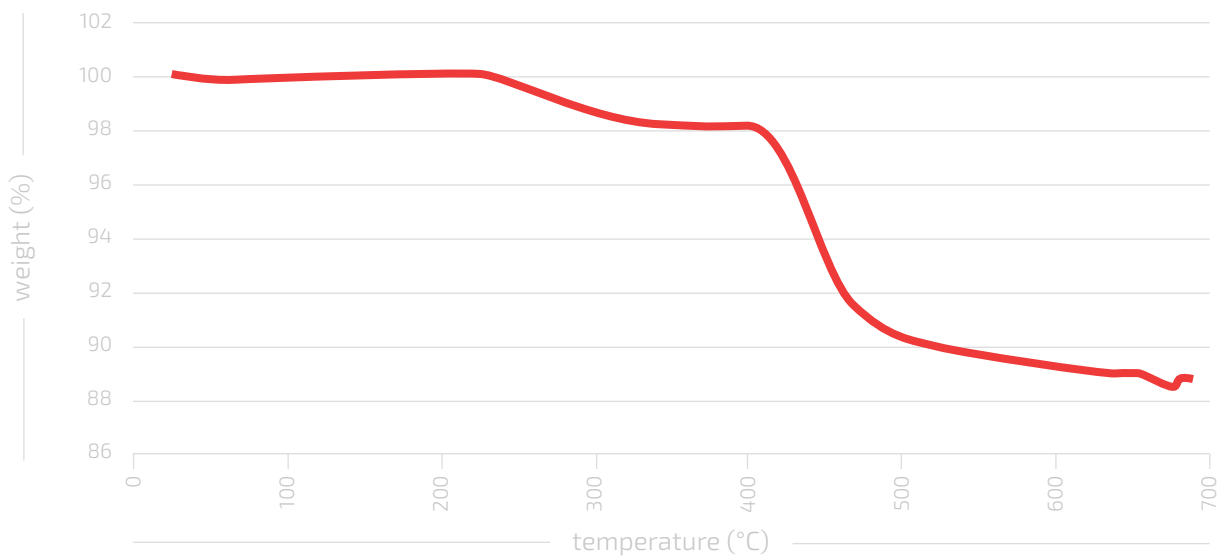
– narrow, homogeneous particle distribution for even performance –



Uniform particle distribution is particularly important when used as an anti-blocking additive/spacer in thin-layer films and coatings.

### TGA Polypearl ME

– very good temperature resistance for use in many polymers –



The high temperature resistance enables use in many technical plastics without yellowing.

## **Coatings**



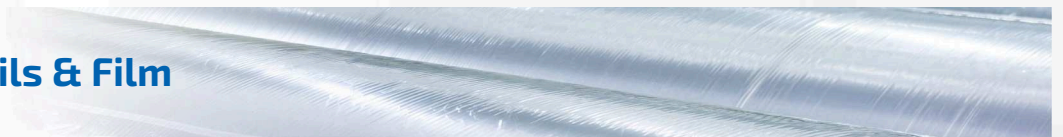
- antiblocking / spacer
- haptics
- matting
- light diffusor
- very good lubricant properties / slip
- excellent scratch resistance
- anti-squeak coatings / furniture coatings
- structure / softfeel
- rubber coatings
- LED encapsulation
- Optical films
- IMC

## **Plastics & Compounds**



- high effective light diffusion additive for PC · PMMA · PA · PVC · PS · etc.
- homogeneous light distribution
- very good scattering effect
- no yellowing
- low RI
- use in profiles, displays, LCD

## **Masterbatch Foils & Film**



- organic antiblocking additive
- use in foils and high-gloss films
- excellent transparency, no clouding
- non-migrating
- temperature stable, hot slip
- tasteless and odourless
- low COF
- high belt speeds
- light diffusion in foils and films

## Functional and colourful solutions

Since 2010, Coating Products has specialized in the distribution of high-quality additives and colorants for plastics, paints and coatings.

### Our values

... determine our daily actions and our success. We provide you with expert advice and the best possible support for your projects. Development and growth are important to us in order to be able to offer you innovative solutions. We work closely with our reliable suppliers.

- Reliability
- Advancement
- Responsibility
- Kindness

### Our commitment

Responsibility shapes the future: At Coating Products, we are committed to the Supply Chain Act and focus on Corporate Social Responsibility (CSR). Through transparent supply chains and sustainable action, we actively contribute to positive change – both for our company and for society.

We are committed to upholding ethical standards and acting responsibly. We have set out our requirements with regard to ethical business behaviour and social and environmental responsibility in our Code of Conduct. We emphasise our commitment to responsible action and sustainable business practices by participating in EcoVadis.

### Sustainability

... is very important to us. We purchase electricity from renewable sources. We always send your samples in climate-neutral and recyclable packaging.

### Digital Working

... whenever possible, is a matter of course for us.

**With our Polypearl™ brand,  
we set an example  
for quality and efficiency!**





**We make the world  
more functional and colourful!**

POLYMER ADDITIVES · COATING ADDITIVES

**Your partner for innovative additives and colorants**



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