

TSR9500

Description

TSR9500 are spherical silicone beads with narrow particle size distributions and a mean particle diameter of approximately 5 microns. The low refractive index and uniform particle size are especially beneficial for light diffusion applications when the beads are added to polymer systems such as polycarbonates, polystyrene and acrylics. The high thermal stability of the silicone beads allows for high temperature processing including extrusion and injection molding.

Key Features and Typical Benefits

- Low refractive index gives optimal light diffusion properties at low dosage levels when the beads are formulated with acrylic, polystyrene and polycarbonate resins
- Spherical geometry results in provides for uniform particle distribution in organic binders and polymers
- High heat stability allows TSR 9500 to be processed with plastics using typical polymer processing equipment, i.e., extruders, injection molders
- Improvement in wear resistance and modification of slip properties of polymer surfaces

Typical Physical Properties

| Properties | | |
|-----------------------------------|-------|-----------------------|
| Appearance | | White spherical beads |
| Average Particle Size | µm | 5.0 |
| Weight loss at 250 °C for 30min | % | 0.4 |
| pH | | 7.0 |
| Particle Specific Gravity (25 °C) | g/cm3 | 1.32 |
| Bulk Gravity | g/ml | 0.35 |

| | |
|------------------|------|
| Refractive Index | 1.42 |
|------------------|------|

Typical properties are average data and are not to be used as or to develop specifications.

Heat Stability

The following table shows the percentage of weight loss for TSR9500 after heating to 350 and 900 °C, respectively.

| Heat Stability | |
|-------------------------|---------|
| Weight Loss % at 350 °C | 2 - 3 |
| Weight Loss % at 900 °C | 10 - 12 |

Note: Rate of temperature increase = 5 °C/min

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

From automotive to healthcare, from electronics to construction, products from Momentive Performance Materials Inc. are practically everywhere you look. We are a

global leader in silicones and advanced materials with a 70+ year heritage of innovation and being first to market – with performance applications that improve everyday life. By knowing our customers’ needs and creating custom technology platforms for them, we provide science based solutions to help customers increase performance, solve product development issues and engineer better manufacturing processes.

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