

A smooth, skin-like velvety powder

RT-3508

Product Description:

RT-3508, a spherical microparticle of surface-grafted polyurethane-modified silicone elastomer, can be added to inks, paints, coatings, and elastomeric materials to provide a unique, soft, velvety feel as well as excellent abrasion and scratch resistance.

RT-3508 itself offers advantages such as good dispersibility, excellent lubricity, and easy flow.

RT-3508 has moderate hardness and elasticity; for applications requiring high hardness and a smooth, velvety feel, consider

Properties:

- Provides a unique, soft and velvety feel
- Improves wear and scratch resistance
- Resistant to ageing
- Low moisture absorption
- Does not affect the elastomer's ability to coat various polymers when added
- Does not affect the elastomer's chemical resistance
- The elastomer retains suitable mechanical strength after addition

Advantages :

- High silicone content, offering superior heat resistance and ageing resistance
- Surface-grafted polyurethane significantly enhances compatibility
- Low to no dust generation

Main components:

Microspherical micron-sized particles of silicone elastomer with grafted polyurethane

Particle Size Selection :

To achieve a distinctly matt finish, products with larger particle sizes, such as RT-3508, can be selected; these also provide a more pronounced tactile sensation.

Typical physical properties:

Appearance	White, free-flowing powder
Volatile Matter Content	<1.0Wt %
Specific Gravity (25°C)	0.98-1.05g/cm ³
pH	7.0
Refractive Index	1.4070
Average Particle Size	8.0 μm

Applications:

- Added to inks, paints and coatings to impart a soft, velvety feel
- Added to elastomeric materials such as TPU, TPE and TPV to impart a soft, velvety feel
- Improves the abrasion and scratch resistance of polymers and coatings

Recommended dosage:

Depending on requirements such as tactile feel and surface gloss, the recommended addition level of RT-3508 in inks, coatings and elastomeric materials is 1–10 per cent.

Method of use:

A dispersion disc, three-roll mill and sand mill can aid dispersion, but ultrasonic treatment is the most effective.

Precautions:

1. Although the RT-3508 product is characterised by low dust emission, users are still advised to wear a face mask, safety goggles and other protective equipment when opening the packaging, handling the material and during similar operations to ensure their own safety.
2. To ensure that RT-3508 disperses effectively in polymers and coatings and delivers optimal performance, it is recommended that it be added using dispersing equipment such as twin-screw extruders, dispersing discs and three-roll mills.

Packaging:

Typical packaging consists of 15 kg plastic bags or 30 kg cardboard drums lined with plastic bags; samples are supplied in 250 g plastic bags.

Storage:

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; For more information, please visit: <https://www.rk-chem.com>

RT-3508 must always be kept in its unopened original packaging and stored at a temperature not exceeding 35 °C. The shelf life of RT-3508 is 12 months.