

## Gransil PSQ

### INCI NAME

Polymethylsilsesquioxane

### PERFORMANCE

- High performing spherical powder
- Provides enhanced aesthetics to formulations
  - Delivers excellent slip, fluidity and overall skin feel
  - Optimized soft focus, light diffusion and wrinkle correction
  - Strong de-tackifying and anti-caking properties
- Non-thickening effect
- Excellent water-repellency and resistance

### FORMULATION

- Can be formulated into O/W emulsions, W/O emulsions and anhydrous systems
- Applications include skincare, color cosmetic, sun care and hair care formulations

Technical Support? [formula@grantinc.com](mailto:formula@grantinc.com)

### PHYSICAL PROPERTIES

<b>Appearance</b>	White powder
<b>Odor</b>	Odorless
<b>Non-Volatile Matter, wt%</b> (105°C, 1.5g, 3hrs, Gravity Oven)	97.00 – 100
<b>Loss on Drying, wt%</b> (105°C, 1.5g, 1hr, Gravity Oven)	0 – 1.00
<b>Average Particle Size, µm</b>	4 – 6
Particle Size Range	2 – 10
Small Particles <2µm, %	5.0 Max.
Large Particles >7µm, %	10.0 Max.
<b>Heavy Metals, ppm</b>	<20
<b>Arsenic, ppm</b>	<2
<b>Methanol, %</b>	<0.1
<b>pH</b> (2% Solution in water/methanol = 1:1)	6.00 – 8.00
<b>Shelf Life</b>	Three years in a closed container
<b>PACKAGING</b>	20 kg drum

Revised 8/12

*Non-Warranty: We offer our products in good faith, but without guarantee as conditions and methods of application are beyond our control. We suggest the prospective user determine suitability and compatibility before adapting them on a commercial scale.*

## Grant Industries Powder Technology Quick Reference Guide

Two Main Product Categories:

1. Elastomer Powders
  2. Microsphere Powders
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### 1. Elastomer Powders

Key Benefits-

- matte appearance
- oil thickening, sebum absorption
- cost-effective way to obtain elastomer "gel" feel*
  - disperse in oil (D5, hydrocarbon, etc.) at suggested ratio*
- soft cushioning effect

Products-

- Gransil EP-LS:** purest form (99%) of Polysilicone-11 elastomer
  - 1% Laureth-12 to prevent agglomeration
  - most economical offering of Polysilicone-11
  - high shear requirement
- Gransil ECW:** surface treated w/ carnauba wax
  - easy to disperse, *no high shear requirement*
  - enhanced cushioning and adhesion
- Gransil EPSQ:** provides unique spongy texture
  - enhanced thickening ability, highest oil absorption
  - good absorption of glycols and glycerin

### 2. Microsphere Powders

Key Benefits-

- soft focus, light diffusion, wrinkle correction
- provides good slip, fluidity, excellent de-tackifying properties
- excellent skin feel, non-thickening, thixotropic

Products-

- Gransil PSQ:** polymethylsilsesquioxane
  - spherical powder, 4-6 average micron size
  - oil dispersible
- Gransil PSQ-45:** polymethylsilsesquioxane
  - spherical powder, 4.5 average micron size
  - oil dispersible
- Granhydrosil PSQ-W-GL (NP):** PSQ dispersed in glycerin
  - non-tacky delivery of glycerin
  - excellent skin hydration and moisturizing effect
  - paraben free
- Granpowder USQ:** PSQ/Polyurethane powder blend
  - enhanced soft feel and light diffusion properties
  - dual peak distribution of particle size for performance optimization