

## Functions



## Spherical Silicone Resin Powder with 3D Network Structure

# E+

### Product Information

- INCI Name: Polymethylsilsesquioxane
- Substance Name: Silsesquioxanes, Me
- CAS No.: 68554-70-1
- EC List No.: 614-610-5

### Applications

Skin Care



Makeup



Point Makeup



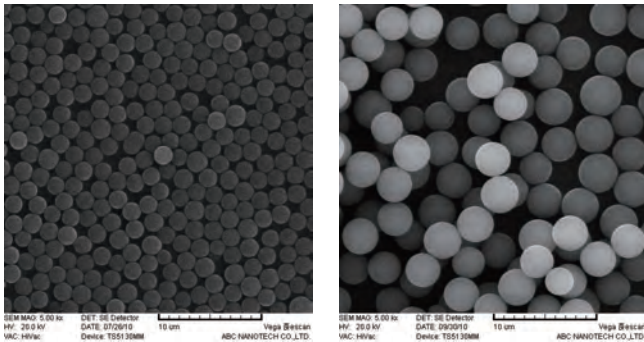
Sun Care



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## Product Images



## Features

- Makes sensory experiences
- Reduces tackiness of formulations
- Enhances fluidity and spreadability
- Improves lubricity of cosmetics on the skin
- Protects applications from sweat or moisture
- Has excellent chemical and thermal stability
- Covers defects and wrinkles
- Prevents greasiness
- Diminishes the look of sharp makeup lines

E+ is a hybrid powder of inorganic and polymeric powder for the use in cosmetics. It has merits of both inorganic powder and polymeric powder. It provides soft touching feeling as well as high chemical and thermal stability.

The texture implemented in the formulation depends on its physical properties and chemical structures. Particle size is one of the important factors.

### • Texture by particle size

Smaller	←	→	Bigger
Better adhesion Creamier	←	→	Better ball bearing More powdery

E+ 710 and 715 have much fluidity because of the its silky surface and big particle size. They flow like water.

Hydrophobicity of E+ enhances the waterproof property of cosmetics and makes itself dispersed homogeneously in oil phase of formulations. E+ is very inert, so it does not swell in the formulations.

Particle size of E+ also affect its optical properties.

### • Optical property by particle size

Smaller	←	→	Bigger
Hazier	←	→	Natural looking

Especially E+ 508 and 520 help cosmetics to diffuse light more. They cover spots and blur wrinkles on the skin.

## Guide Formulation: O/W Sun Care (SPF 41 PA++)

Phase	Product Name	INCI Name	wt%
A	SILICONE 6cs	Dimethicone	2.00
	OMC	Ethylhexyl Methoxycinnamate	7.00
	NEO HELIOPAN E1000	Isoamyl P-Methoxycinnamate	5.00
	SOLAVEIL CT-100	C12-15 Alkyl Benzoate, Titanium Dioxide, Aluminum Stearate, Polyhydroxystearic Acid, Alumina	3.00
B	UVINUL T 150	Ethylhexyl Triazone	4.00
	TINOSORB S	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	1.50
	UVINUL A PLUS	Diethylamino Hydroxybenzoyl Hexyl Benzoate	1.50
	AMPHISOLA	Cetyl Phosphate	2.00
	ARLACEL 165	Glyceryl Stearate, PEG-100 Stearate	1.20
	GMS-205	Glyceryl Stearate	0.50
	LANETTE O	Cetearyl Alcohol	2.00
C	DI WATER	Aqua	15.00
	KOH (85%)	Potassium Hydroxide	0.40
	EDTA 3NA	Trisodium EDTA	0.02
	GLYCERIN	Glycerin	10.00
	DEXPANTHENOL	Panthenol	1.00
D	DI WATER	Aqua	to 100
	DIPROPYLENE GLYCOL	Dipropylene Glycol	2.00
	CROPADIOL-6A	1,2-Hexanediol	1.50
	E+ 540	Polymethylsilsesquioxane	3.00
	CARBOPOL 980 (2%)	Carbomer	5.00
E	PEMULEN TR2 (2%)	Acrylates/C10-30 Alkyl Acrylate Crosspolymer	3.00
	FRAGRANCE	Fragrance	0.10

## Product Grades

Grades	Average Particle Size (D50, μm)	Average Oil Absorption Degree (mL/100g)
E+ 508	0.8	60
E+ 520	2.0	60
E+ 540	4.0	60
E+ 560	6.0	60
E+ 580	8.0	60
E+ 710	10.0	60
E+ 715	15.0	60