# *Product Data*Fine Particle Silicone Resin **TOSPEARL 145**

TOSPEARL 145 is a silicone micro resin for use as an additive to improve the performance of plastics, rubbers, paints, etc. In addition to providing the specific characteristics of silicones, such as water repellency and lubricity, TOSPEARL 145 has a lower specific gravity than conventional inorganic fine powders and also has excellent heat resistance as compared with conventional organic fine powders.

### **KEY FEATURES**

- Excellent water repellency
- Excellent lubricity (light lubrication)
- Lower specific gravity than inorganic fine powder
- Superior to organic fine particles in heat resistance
- Insoluble in organic solvents
- Low cohesiveness
- No melt even if heated to 900°C
- Upon calcination, gives truly spherical silica fine particles
- When charged negatively, amount electrified is large
- Sharp particle size distribution

# APPLICATIONS

- Rubber Industry: Improvement in wear resistance, modification of slip properties of rubber surfaces
- Paints and Ink: Clarification of color tone, luster control, blocking prevention, wear resistance improvement
- Synthetic Resin: Increasing wear resistance of synthetic resins such as epoxy, acrylic, polyester, and ABS; blocking prevention, slip property improvement, and maintenance of transparency of plastic films such as PE and PP
- Others: Improvement in dispersibility, flowability and aggregation prevention of pigments and ceramic particles

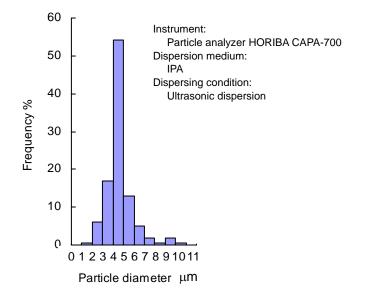
# **TYPICAL PROPERTY DATA**

PROPERTIES		
Appearance		Truly spherical, fine white particle
Mean particle diameter	μm	4.5
Weight loss (250°C, 30min)	%	0.3
pH*		7.0
True specific gravity (25°C)		1.32
Bulk specific gravity		0.43
Specific surface area	m²/g	20
Linseed oil absorption	ml/100g	58

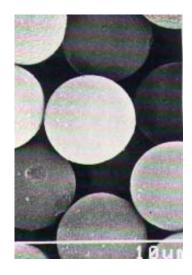
\*: 2% dispersed in a solution of Methanol/Water=1/1

Typical property data values should not be used as specifications.

## PARTICLE SIZE DISTRIBUTION



# ELECTRON MICROGRAPH



#### HANDLING AND SAFETY

- Wear dust mask, eye protection and protective gloved as required while handling the product.
- Use the product in a well ventilated area.

#### STORAGE

- Store in a cool, dry place out of direct sunlight.
- Keep out of the reach of children.

#### PACKAGING

- 1kg plastic bottle available
- 10kg corrugated cardboard box available

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