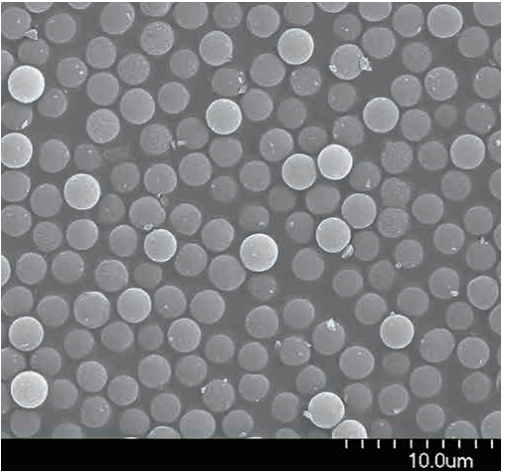
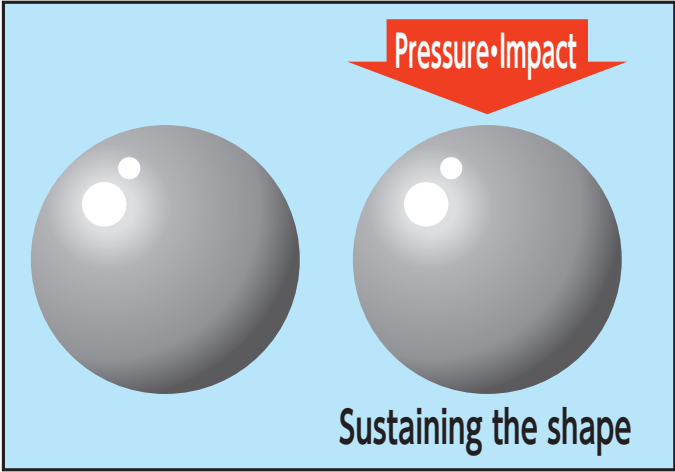
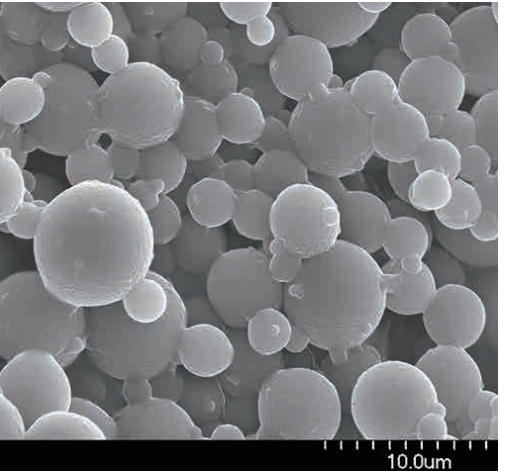
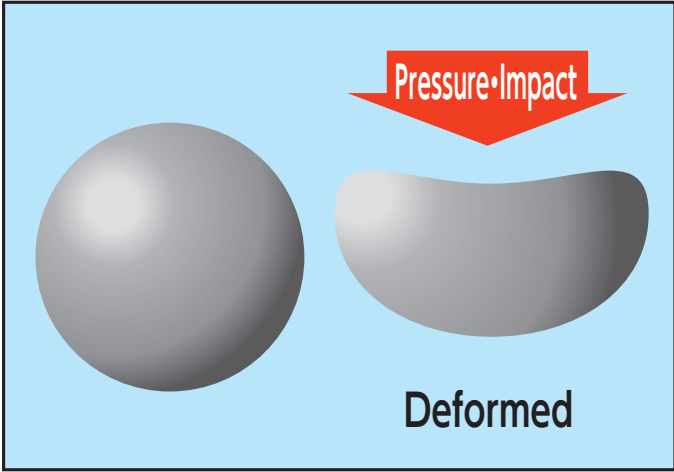
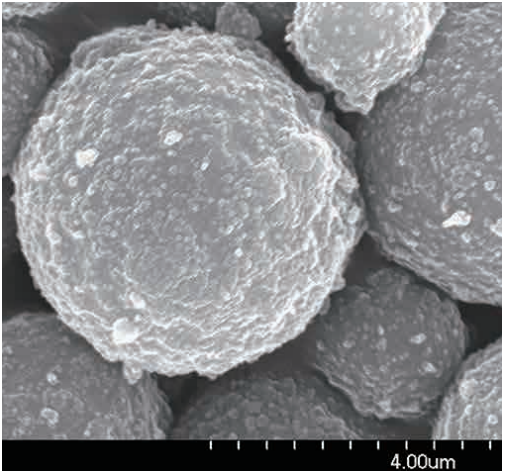
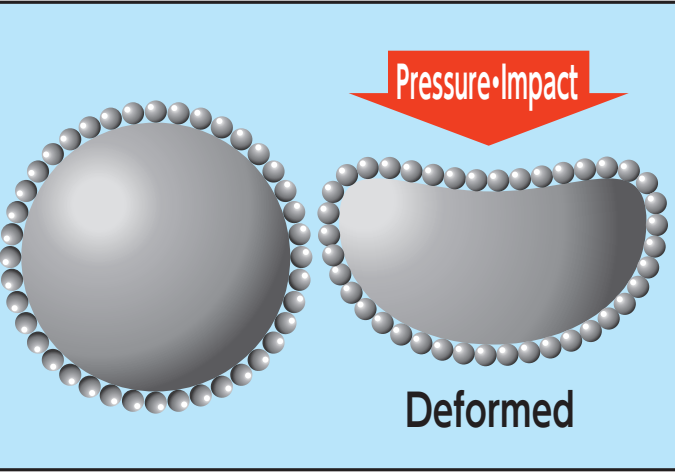
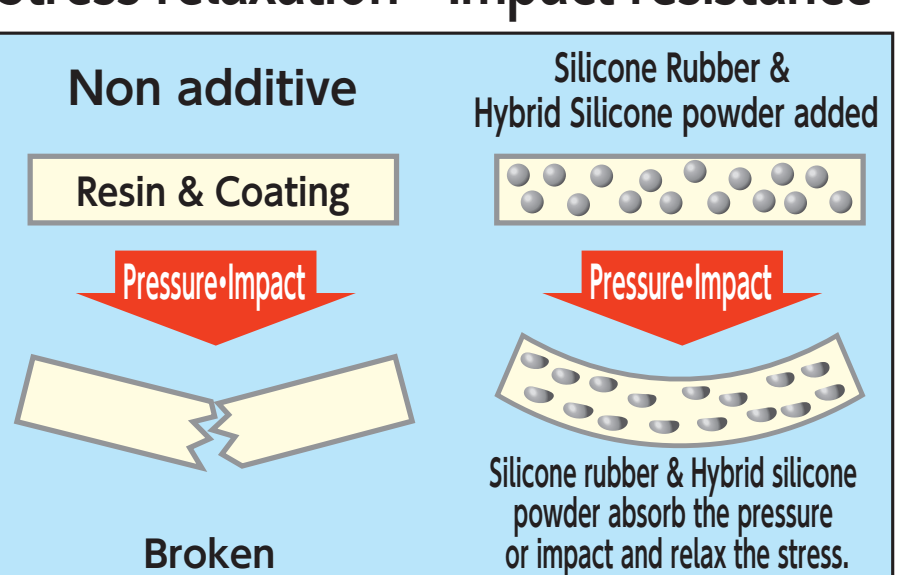
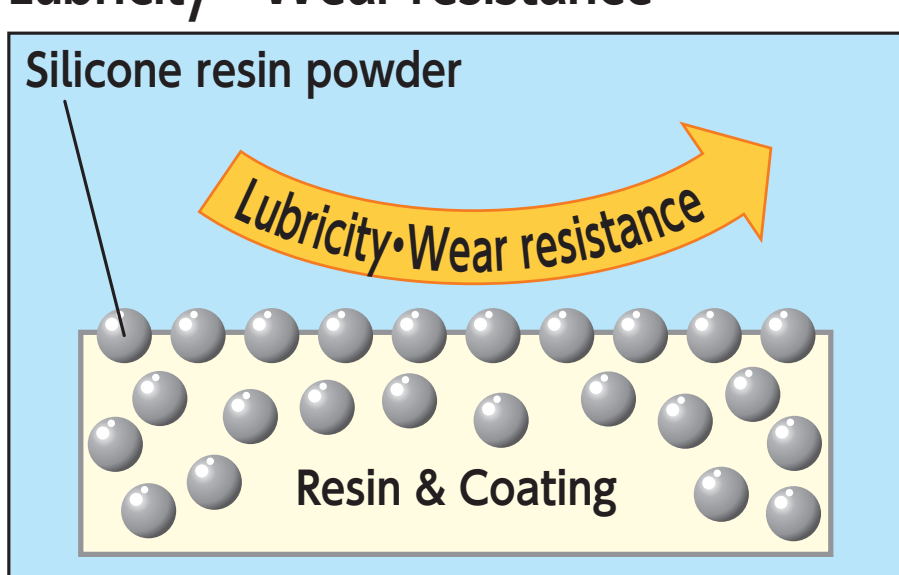
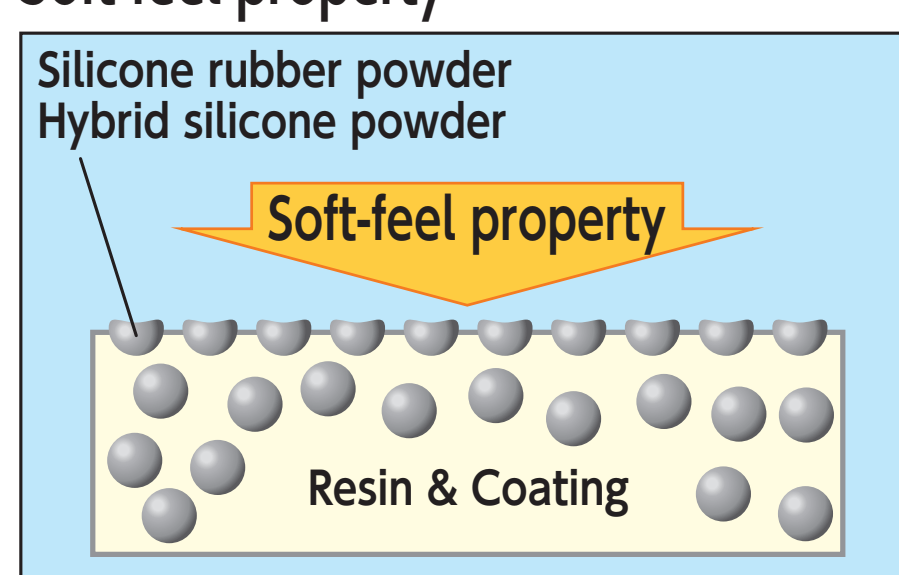
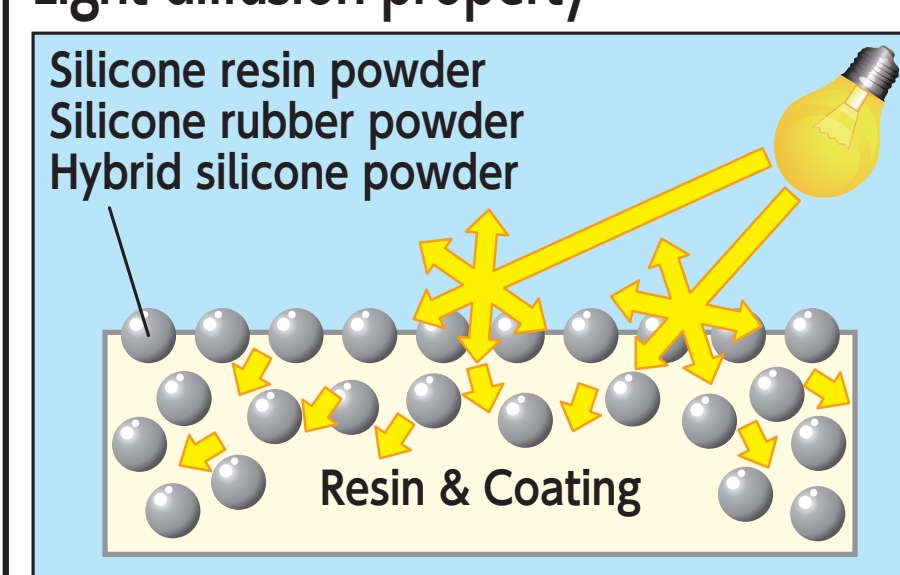


Silicone Powders

Shin-Etsu has developed a unique line of silicone powders which fall into three categories: Hybrid Silicone Powder, Silicone Rubber Powder and Silicone Resin Powder.

Silicone Resin Powder		Silicone Rubber Powder		Hybrid Silicone Powder	
Molecular structure : Cage-link structure		Molecular structure: Straight-chain crosslinked polymer		Form : Rubber powders covered with resin	
● KMP-590 by scanning with electron micro scope	● Model of silicone resin powder	● KMP-594 by scanning with electron micro scope	● Model of silicone rubber powder	● KMP-600 by scanning with electron micro scope	● Model of hybrid silicone powder
					
■ Features		■ Features		■ Features	
Heat resistance	++	Heat resistance	+	Heat resistance	+
Weatherability	++	Weatherability	++	Weatherability	++
Dispersibility into resins	++	Dispersibility into resins	±	Dispersibility into resins	++
With organic solvents	No swelling	With organic solvents	Swelling	With organic solvents	Rubber part swells

Enhanced properties

Stress relaxation • Impact resistance		Lubricity • Wear resistance		Soft-feel property		Light diffusion property	
							
Resin powder	-	Resin powder	++	Resin powder	-	Resin powder	++
Rubber powder	++	Rubber powder	+	Rubber powder	++	Rubber powder	++
Hybrid powder	++	Hybrid powder	++	Hybrid powder	++	Hybrid powder	++

++: Excellent +: Good ±: Satisfactory -: Poor

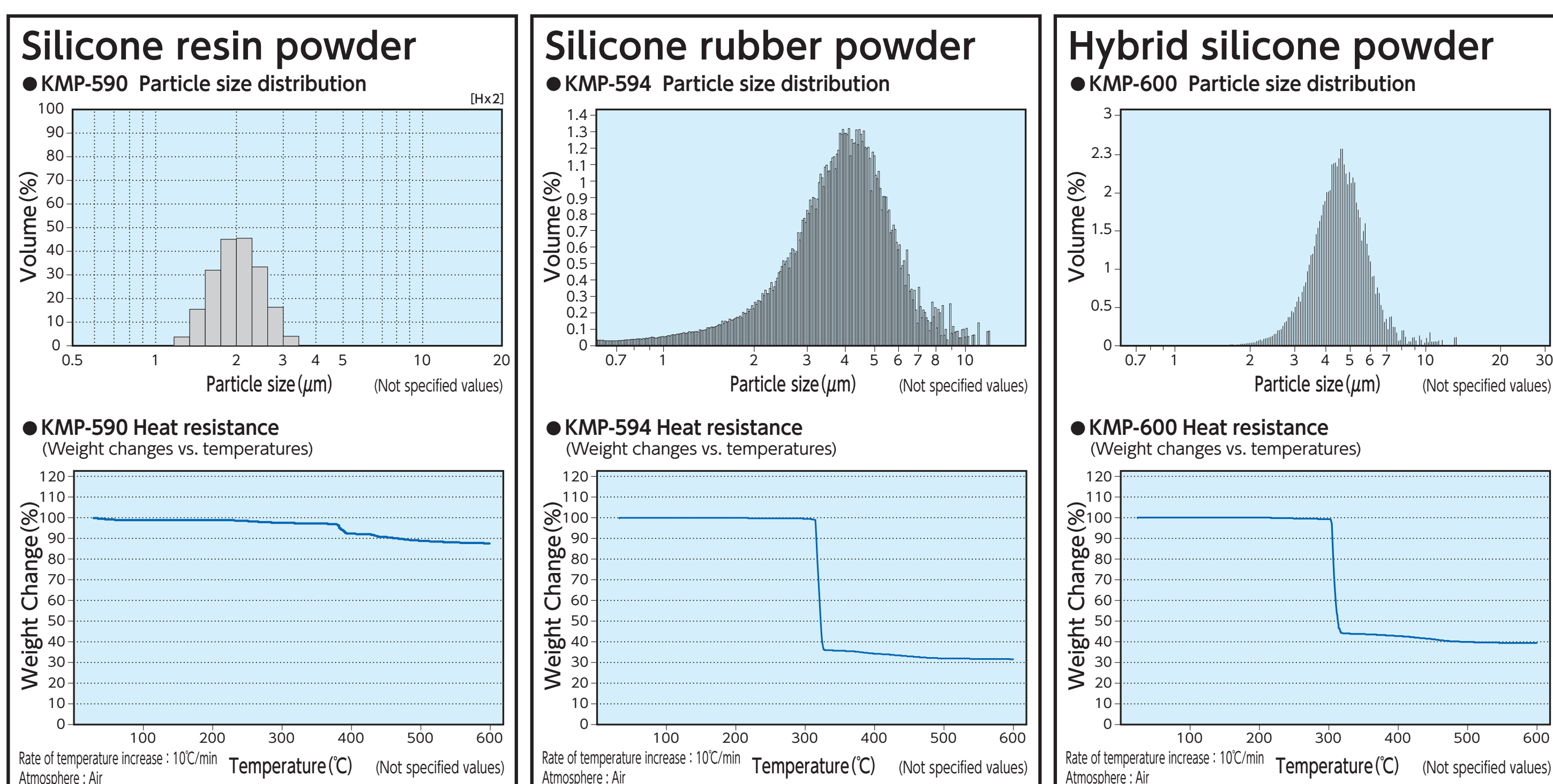
General property

Type	Parameter	Product name	Shape	Average particle size μm	Particle size distribution μm	True specific gravity	Moisture content %	Rubber hardness Durometer A	Refractive index	
									Rubber part	Resin part
Rubber		KMP-594	Spherical	5	1~10	0.97	0.1	30	1.41	-
		KMP-597	Spherical	5	1~10	0.97	0.1	30	1.41	-
		KMP-598	Spherical	13	2~30	0.97	0.1	30	1.41	-
		X-52-875	Association	30	1~100	0.97	0.1	35	1.41	-
Resin		KMP-590	Spherical	2	1~4	1.3	1	-	-	1.43
		KMP-701	Spherical	3.5	1~6	1.3	1	-	-	1.43
		X-52-1621	Spherical	5	1~8	1.3	1	-	-	1.43
		X-52-854	Spherical	0.7	0.2~5	1.3	1	-	-	1.43
		X-52-7085	Spherical	11	8~15	1.3	1	-	-	1.43
Hybrid		KMP-600	Spherical	5	1~15	0.99	0.1	30	1.41	1.43
		KMP-601	Spherical	12	2~25	0.98	0.1	30	1.41	1.43
		KMP-602	Spherical	30	4~60	0.98	0.1	30	1.41	1.43
		KMP-605	Spherical	2	0.7~5	0.99	0.1	75	1.42	1.43
		X-52-7078C*	Spherical	2	0.7~5	1.00	0.1	50	1.41	1.43
		X-52-7030	Spherical	0.8	0.2~2	1.01	0.1	75	1.42	1.43

* Reduced low molecular weight siloxane type of KMP-605

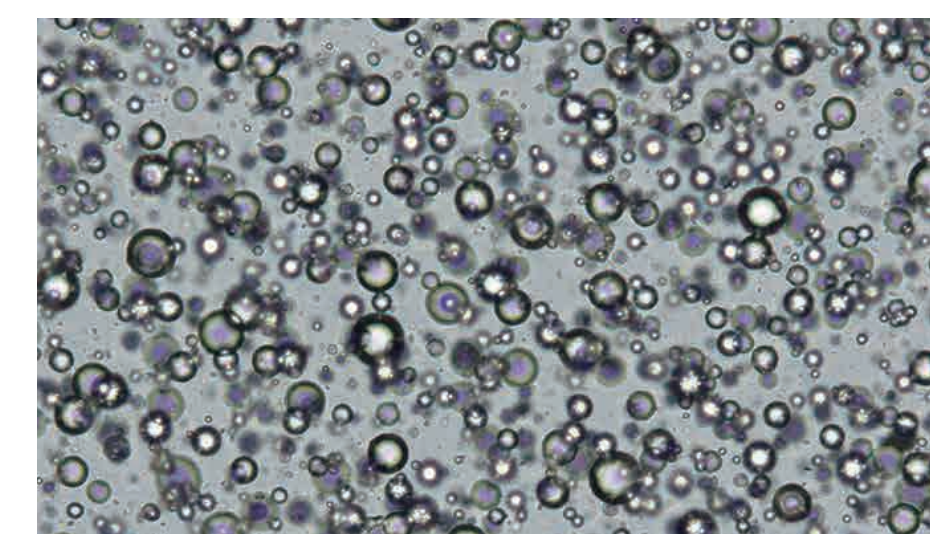
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Product data

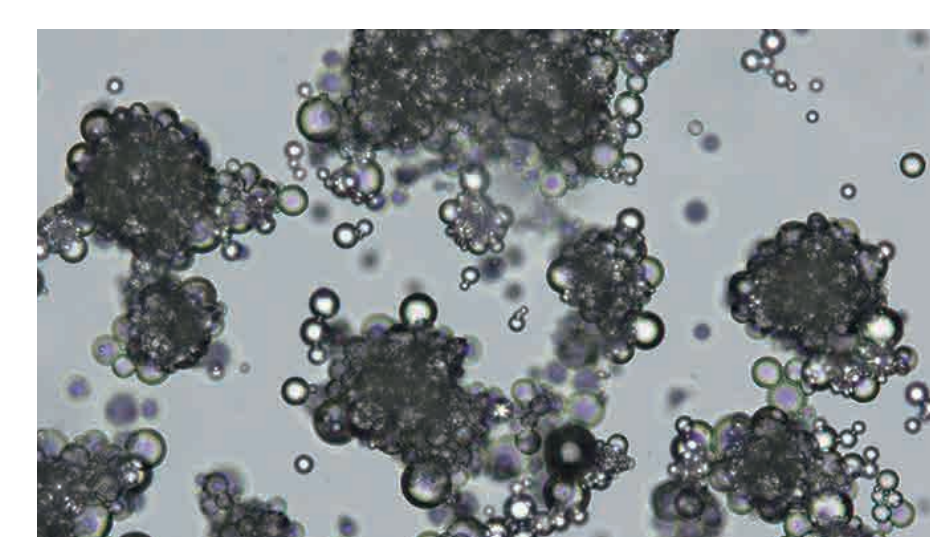


Comparison of dispersibility

Dispersibility into liquid epoxy resin



● Hybrid silicone powder KMP-601



● Silicone rubber powder*

*Even with silicone rubber powders, applying a shear force improves dispersibility in resins.