



PPG HI-SIL[®]

Reinforcing Silica Fillers

SILICONE RUBBER

PPG offers a product line of synthetic amorphous precipitated silicas for use as reinforcing fillers in black, non-black, colored and translucent silicone compounds.

Compared to fumed silica, PPG HI-SIL[®] silica products provide:

- Acceptable reinforcement at lower cost
- Significantly reduced crepe hardening
- Excellent compression-set resistance
- Excellent resistance to heat aging

PPG *Hi-Sil* silicas can be used alone or in conjunction with fumed silica to extend the compound, increase hardness and reduce tackiness.

PPG *Hi-Sil* 532EP silica provides reinforcement (tear resistance) with increased hardness and dynamic properties (rebound) compared to crystalline silica (ground quartz).

PPG *Hi-Sil* 900 reinforcing silica provides good tensile strength, tear resistance, compression-set, and good dynamic properties such as rebound.

PPG *Hi-Sil* 135 silica combines relatively rapid incorporation and low Williams Plasticity with slightly higher tensile strength compared to PPG *Hi-Sil* 900 silica.

PPG *Hi-Sil* 132 silica has a higher surface area, builds viscosity more rapidly and leads to higher durometer at equal loading than either PPG *Hi-Sil* 900 or PPG *Hi-Sil* 135 silica.

PPG *Hi-Sil* 915 silica yields high initial compound viscosity, but with less effect on durometer than PPG *Hi-Sil* 132 silica. It also displays initial viscosity build without generating excessive crepe hardening normally associated with fumed silica.



Product Safety and Regulatory Information

For the latest product safety and regulatory information, please reference the Safety Data Sheets at www.ppgsilica.com.

Samples

Samples are available upon request from Customer Service.

Storage

To ensure product integrity, PPG recommends that its silica products be stored under dry, clean conditions and protected against exposure to other substances. Since silica may pick up moisture, we also recommend that products that are stored for more than one year from the date of manufacture be re-tested for moisture content. There is no shelf life limit when stretch-wrapped palletized units or bags are kept under the above stated conditions. Pallets should not be double-stacked.

Safety and Health Effects

PPG recommends that, before use, anyone using or handling this product thoroughly read and understand the information and precautions on the label, as well as in other product safety publications such as the Material Safety Data Sheet. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be. The products mentioned herein can be hazardous if not used properly. Like all potentially hazardous materials, this product must be kept out of the reach of children.



Product	N ₂ Surface Area, BET-5 (m ² /g)	N ₂ Surface Area, BET-1 (m ² /g)	pH	Na ₂ SO ₄ Wt. %	Particle Size (µm)
<i>Hi-Sil</i> 532EP	55	60	8	≤ 2	15
<i>Hi-Sil</i> 900	135	150	7	≤ 2	15
<i>Hi-Sil</i> 135	150	170	7	≤ 2	16
<i>Hi-Sil</i> 132	180	200	7	≤ 2	15
<i>Hi-Sil</i> 915	195	215	7	< 0.5	11

Packaging

Standard packaging as follows:

Product	Net weight		Bag Construction
	lb	kg	
<i>Hi-Sil</i> 532EP	44	20	Multi-Wall Paper
<i>Hi-Sil</i> 900	30	13.6	Multi-Wall Paper
<i>Hi-Sil</i> 135	44	20	Multi-Wall Paper
<i>Hi-Sil</i> 132	44	20	Multi-Wall Paper
<i>Hi-Sil</i> 915	25	11.3	Multi-Wall Paper

Please consult with Silica Customer Service or your Silica Sales Representative regarding additional packaging options, including custom package sizes and bulk shipments in Flexible Intermediate Bulk Container (FIBC), truckload, or railcar units.

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