



PPG Silica Products

## Hi-Sil™ Reinforcing Fillers

SILICONE RUBBER

PPG Silica Products 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, Hi-Sil™ silicas provide:

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

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

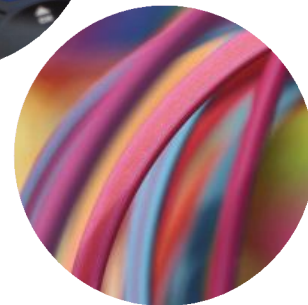
**Hi-Sil 532EP** silica provides reinforcement (tear resistance) with increased hardness and dynamic properties (rebound) compared to crystalline silica (ground quartz).

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

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

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

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



### **Potential Applications**

**Sporting Goods**

**Wire and Cable Coatings**

**Conveyor Belts**

**Engine Mounts**

**Tire Treads**



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

### Samples

Samples are available upon request from Customer Service.

### Storage

To ensure product integrity, PPG recommends that our 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 Industries 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.

### Packaging

Standard packaging as follows:

Product	Net weight		Bag Construction
	lb	kg	
Hi-Sil 532EP	44	20	Multi-Wall Paper
Hi-Sil 900	30	13.6	Multi-Wall Paper
Hi-Sil 135	44	20	Multi-Wall Paper
Hi-Sil 132	44	20	Multi-Wall Paper
Hi-Sil 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.

Visit [www.ppgsilica.com](http://www.ppgsilica.com) for MSDS and product specifications.



**PPG Industries**

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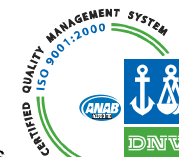
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