

● Rubber

● Silica for Tires

- The JS-HD series of high-dispersion and high-reinforcement precipitated silica are used in tires to effectively improve tire performance. This application features advantages including:
 - 1. Reduced rolling resistance of tires which leads to lower fuel consumption, and improved wet traction and safety performance;
 - 2. Enhance processability of tires with superior tensile strength, tear strength, elongation at break, etc;
 - 3. Lower cost of production due to the replacement of carbon black by precipitated silica.

JS-185 Performance Silica-Powder

Test Methods	Properties	Units	Target Values (Spec Limits)	Actual Values
HG/T3065-2008	Loss on drying (2Hrs,105℃) 加热减量	%	4.0-7.0	5.52
HG/T3066-2008	Ignition loss 1000℃ 灼烧减量	%	Max.7.0	4.27
HG/T3072-2008	DBP absorption value DBP 吸收值	cm ³ /g	2.0-2.6	2.56
HG/T3067-2008	pH value (10%aqueous suspension) pH 值	—	6.0-8.0	6.97
HG/T3062-2008	SiO ₂ (Dry Basis) 二氧化硅(干基)	%	Min.98	98
HG/T3073-1999	BET specific surface area BET 比表面积	m ² /g	170-200	191
	Soluble salt (Na ₂ SO ₄) 可溶性盐	%	Max.1.5	0.74
	Average particle size 平均粒径	μ m	-	13-14
HG/T3064-2008	45μm sieve residue	%	Max.0.5	<0.1

JS-185 Performance Silica-Granular

Test Methods	Properties	Units	Target Values (Spec Limits)	Actual Values
HG/T3065-2008	Loss on drying (2Hrs,105°C)	%	4.0-7.0	5.38
HG/T3066-2008	Ignition loss 1000°C	%	Max.7.0	4.31
HG/T3072-2008	DBP absorption value	cm ³ /g	2.0-2.6	2.54
ANA0320	Ro-Tap Sieve Residue, >30 0µm	%	Min.80	85.6
ANA0350	Ro-Tap Sieve Residue, <75µm	%	Max.10	0.36
HG/T3067-2008	pH value (10%aqueous suspension)	—	6.0-8.0	6.95
HG/T3062-2008	SiO ₂ (Dry Basis)	%	Min.98	98
HG/T3073-1999	BET specific surface area	m ² /g	170-200	192
	Soluble salt(Na ₂ SO ₄)	%	Max.1.5	0.79

■ Silica for Industrial Rubber / Footwear

- Major characteristics of this product include high reinforcement property, good tear strength, and good abrasion resistance. When applied in rubber products, it gives them excellent physical and processing properties. It is mainly used in the shoe soles, rubber hoses, and other rubber industries.

JS-185A SILICA FOR FOOTWEAR

Test Methods	Properties	Units	Target Values (Spec Limits)	Actual Values
HG/T3065-2008	Loss on drying (2Hrs,105℃)加热减量	%	4.0-7.0	7.25
HG/T3066-2008	Ignition loss 1000℃ 灼烧减量	%	Max.7.0	4.21
HG/T3072-2008	DBP absorption value DBP 吸收值	cm ³ /g	2.3-2.8	2.41
HG/T3067-2008	pH value (10%aqueous suspension) pH 值	—	6.0-8.0	6.83
HG/T3062-2008	SiO ₂ (Dry Basis) 二氧化硅(干基)	%	Min.96	98
HG/T3073-1999	BET specific surface area BET 比表面积	m ² /g	170-200	183
	45um sieve Residue 45 微米筛余物	%	Max.0.5	0.1
	Soluble salt (Na ₂ SO ₄) 可溶性盐	%	Max.2.5	0.98
	D50	μm	-	10.24
	D97	μm	-	30.38

■ Silica for Silicone Rubber

- This product uses low-iron sodium silicate as raw material, and features high purity and transparency, low iron-content, good anti-yellowing and reinforcing properties, etc. It is suitable for the silicone rubber industry. Adding silica will effectively improve the tensile strength and vulcanizing properties of silicone rubber.

JS-160 SILICA FOR SILICONE RUBBER

Test Methods	Properties	Units	Target Values (Spec Limits)	Actual Values
HG/T3065-2008	Loss on drying (2Hrs,105℃)	%	4.0-7.0	5.68
HG/T3066-2008	Ignition loss 1000℃	%	Max.7.0	4.22
HG/T3072-2008	DBP absorption value	cm ³ /g	2.0-3.5	2.66
HG/T3067-2008	pH value (10%aqueous suspension)	—	6.0-8.0	6.91
HG/T3062-2008	SiO ₂ (Dry Basis)	%	Min.96	98
HG/T3073-1999	BET specific surface area	m ² /g	—	142
	Soluble salt(Na ₂ SO ₄)	%	Max.1.5	0.94