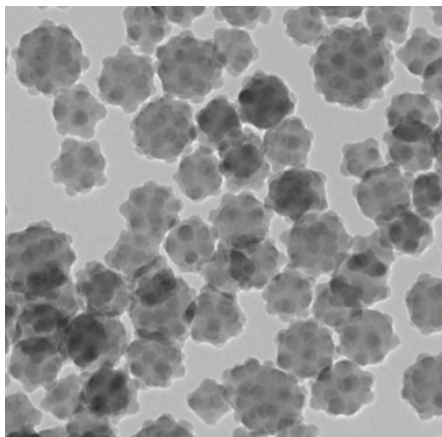


ATLAS™ 100 Silica Composite



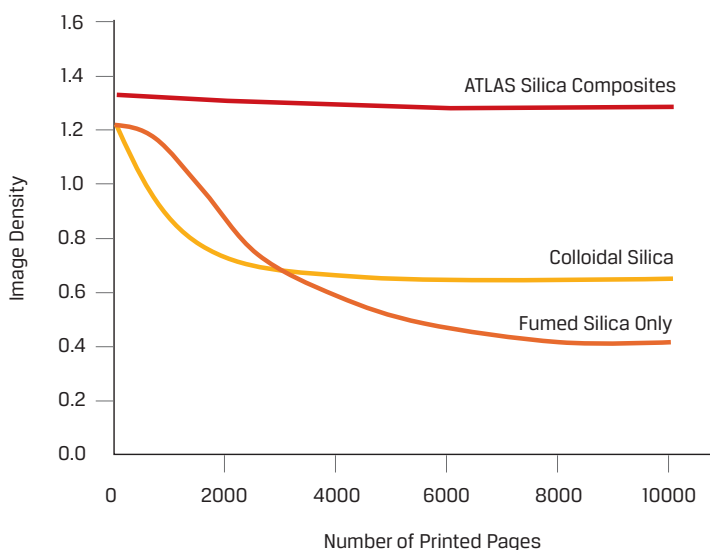
ATLAS 100 silica composite is a breakthrough material for electrophotography applications. It is comprised of hydrophobic silica and polymer in spheroid particles of approximately 100 nm in diameter. The shape and size of ATLAS silica composite particles have been engineered to prevent embedding, migration, and separation from the toner surface.

Typical Characteristics*

Particle size	100 nm
BET Surface Area	60 m ² /g
Surface treatment	HMDZ
Silica type	Modified silica-polymer particle
Tribocharge (silica)	-225 μ C/g
Tribocharge (model toner)	-30 μ C/g
Agglomerate size reduction	No

* The data in the table above are typical test values intended as guidance only, and are not product specifications. Product specifications are available from your Cabot representative. Model is 9 micron polyester toner formulated with single additive for full coverage. Tribocharge measured by standard blow off technique with ferrite carrier.

Toner Durability Over Extended Print Runs*



* Print performance measured with a mono-component printer using model formulations consisting of polyester toner with 325 m²/g fumed silica. ATLAS silica composite or colloidal silica were added as spacer particles, as noted. Wt% loading of spacer particles were adjusted to ensure full toner coverage for all formulations.

ATLAS™ 100 Silica Composite

Efficiency: Lower Loadings, Higher Performance

Because of the lightweight polymer used in ATLAS silica composite particles, approximately 25% less mass is required to achieve the same coverage on the toner surface when compared to traditional fumed or colloidal silica. And because ATLAS silica composite particles deliver higher performance than other silicas even at the same surface coverage, formulators can significantly reduce the loading of spacer particles while maintaining or improving performance of the toner.

The Industry's Broadest Product Line of Toner Additives

ATLAS 100 silica composite is a member of Cabot's broad line of silica additives for toners. An overview of Cabot's entire product line is shown below. Please contact a Cabot representative for more information.

MATERIAL TYPE	TREATMENT	SIZE	POST PROCESSING
<ul style="list-style-type: none"> Fumed silica Colloidal silica Composites 	<ul style="list-style-type: none"> HMDZ PDMS HMDZ/PDMS OTES DiMeDi Cyclic/HMDZ 	<ul style="list-style-type: none"> SPS (8-10 nm primary; 325-220 m²/g BET) MPS (12-18 nm primary; 200-130 m²/g BET) LPS (20-200 nm primary; 90-30 m²/g BET) 	<ul style="list-style-type: none"> Agglomerate size control Alternative packaging options



NORTH AMERICA

Cabot Corporation Business and Technical Center
157 Concord Road
BillERICA, MA 01821-7001
USA
TEL +1 800 462 2313
FAX +1 978 670 7035

SOUTH AMERICA

Cabot Latin American Division
Rue do Paraíso, 148 - 5º andar
04103-000, Sao Paulo, SP BRAZIL
TEL +55 11 2144 6400
FAX +55 11 3253 0051

EUROPE

SIA Cabot Latvia
101 Mukusalas Street
Riga, LV-1004, LATVIA
TEL +371 6705 0984
TEL +371 6705 0900
FAX +371 6705 0985

ASIA PACIFIC

Cabot China Ltd.
558 Shuangbai Road
Shanghai 201108, CHINA
TEL +86 21 5175 8800
FAX +86 21 6434 5532

KOREA

Cabot Korea Ltd.
27th Fl., Trade Tower
159-1 SamSung-Dong, GangNam-Gu, Seoul, (135-729)
KOREA
TEL +82 2 6007 2783
FAX +82 2 6007 2703

JAPAN

Cabot Specialty Chemicals, Inc.
Sumitomo Chiba-Daimon Idg. 3F
2-5-5 Shiba Daimon, Minato-ku, Tokyo 105-0012, JAPAN
TEL +81 3 6820 0255
FAX +81 3 5425 4500

The data and conclusions contained herein are based on work believed to be reliable, however, Cabot cannot and does not guarantee that similar results and/or conclusions will be obtained by others. This information is provided as a convenience and for informational purposes only. No guarantee or warranty as to this information, or any product to which it relates, is given or implied. This information may contain inaccuracies, errors or omissions and CABOT DISCLAIMS ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AS TO (i) SUCH INFORMATION, (ii) ANY PRODUCT OR (iii) INTELLECTUAL PROPERTY INFRINGEMENT. In no event is Cabot responsible for, and Cabot does not accept and hereby disclaims liability for, any damages whatsoever in connection with the use of or reliance on this information or any product to which it relates.