

## DESCRIPTION

- SPHERILEX® DP-0110 (formerly known as EXP 0002-1) is a precipitated amorphous (crystalline-free) silica with unique spherical particle shape and very narrow particle size distribution.
- SPHERILEX® products are available with different particle sizes, but all grades are based on a new patented synthesis process that directly controls particle morphology during the precipitation step. As a result, this new range of silica products provides a unique balance of performance benefits.
- SPHERILEX® DP-0110 has the smallest particle size within the SPHERILEX® family of products, making it ideal for thin film applications or systems where smaller and more transparent particles are preferred. In particular, SPHERILEX® DP-0110 is ideal for achieving burnish- and scrub-resistant satin and eggshell finishes, and, when used in combination with silica matting agents, can enable deep matte, natural-looking wood coatings by improving the scratch, burnish, and mar resistance of the coating. It can also significantly improve the hardness of coil coatings.

## KEY BENEFITS

- excellent mar and burnish resistance
- improves scratch resistance
- improves hardness
- high transparency
- high surface smoothness
- very good washability and scrub resistance
- low viscosity at high loading levels
- very low binder demand
- very low water/solvent demand in the grind process

## EFFECT

## Mar and burnish resistance



## Washability and scrub resistance



## Gloss reduction



## Smooth Surface Profile



## SUITABILITY

## solventborne



## direct grind



## waterborne



## TYPICAL APPLICATIONS

- Wood coatings
- Architectural paints
- Decorative coatings
- Coil coatings
- Plastic coatings
- Floor coatings

## TECHNICAL DATA

delivery form	free-flowing powder
DOA absorption	50 ml/100g
loss on drying	< 7 %
particle size, d <sub>50</sub>	4.4 µm
pH value, 5% in water	7.5
sodium sulfate content	< 1.0 %
specific gravity	2.0
specific surface area (N <sub>2</sub> )	< 12 m <sup>2</sup> /g

## RECOMMENDED ADDITION LEVEL

As supplied calculated on total formulation: 1 - 10 %

## PROCESSING INSTRUCTIONS

It is recommended that this product be added, as supplied, to the grind.

## HANDLING &amp; STORAGE

When stored in an original unopened packaging, the product has a shelf life of 24 months from the date of manufacture. We recommend to store the product in closed containers under dry conditions and to protect the material from volatile substances.

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