Certi-Shine
simply the best polished floor
Where science and art join to make a lasting shine
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Certi-Shine Clear Densifier vs Sodium Silicates

Sodium Silicate Densifiers	Vexcon Chemicals Certi-Shine Clear Concrete Hardener & Densifier
Sodium silicate is the active ingredient	Potassium silicate is the active ingredient
Larger molecule size	Smaller molecule size = Easier penetration
6 to 14% typical active ingredient	18% active ingredient Less material needed for densification
Scrubbing required	Spray on application No scrubbing required
Slower reactivity	Smaller particles penetrate deeply, react more quickly
Large amount of product washes off	More material penetrates so less material required; Reduced waste-water disposal
Heavy whitening possible	More whitening resistant, allows extended time for easy removal of excess material
Surface residue / whitening Requires removal	No surface residue, No whitening; No removal
Longer burnishing required	Rapid gloss development when burnishing
Color not available	Certi-Shine MicroStain: Vibrant color, hard floors
Film-forming "guard" sacrificial coating	Complete System: • Certi-Shine Clear • Certi- Shine Fixative • Certi-Shine Finish Coat Ultra Non-film-forming water & stain repellent
Warranty varies by manufacturer	20 year warranty

Why Silicates Do Not Cure Concrete

Vexcon Chemicals, the American Society for Testing and Materials (ASTM), and the ACI 308R-01 (Guide to Curing Concrete) share a position against the use of silicates to cure concrete.
Per ASTM-C309-98, Note 1: Sodium silicate solutions are chemically reactive rather than membrane-forming; therefore, they do not meet the intent of this specification.
Silicates have several items which reduce their effectiveness for concrete curing:

1. Silicates are natural deliquescents: they draw water from within the slab to the surface.
2. Silicates cause uneven drawing of water, which causes spider cracking.
3. Silicates cause different reaction products; cement uses the "water of hydration" of the silicates to attempt hydration, which forms a soft powdery complex instead of well-hydrated concrete.
4. Silicates react more quickly with the calcium on the surface of the slab than with the cement.
5. Silicates cannot be demonstrated to reduce water evaporation from surface, or cure concrete by any ASTM Tests.

For all these reasons, it is recommended to cure concrete by the most appropriate method for each slab: water or moisture curing, wet curing blankets, dissipating curing compounds, or acrylic cure & seal materials.