

**WACKER**

CREATING TOMORROW'S SOLUTIONS

SILRES®

INDUSTRIAL COATINGS | METAL AND WOOD

**BE BRILLIANT!**  
WITH SILRES® IC 368 LIQUID SILICONE  
INTERMEDIATE

# SHINE – WHATEVER THE WEATHER

Good news! Now you can increase the weathering resistance of coatings while meeting low-VOC requirements, and benefit from a reduced reaction time. The key is SILRES® IC 368: a solvent-free liquid silicone intermediate from WACKER.

A coating's properties are mainly determined by the choice of binder. The use of organo-silicon hybrid resins offers a unique property profile especially suited to challenging applications such as facade sheeting coatings or protective wood paints for outdoor uses.

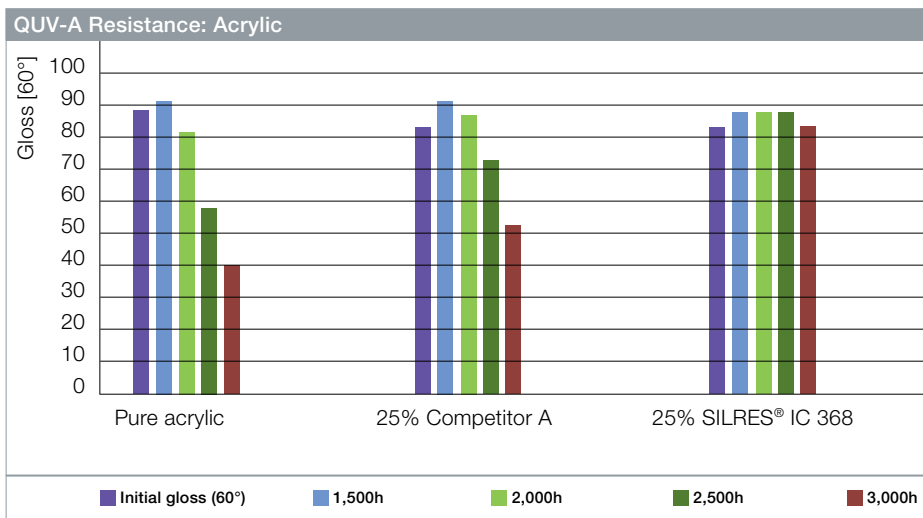


# BRILLIANT – PERFORMANCE IN ACRYLIC PAINTS

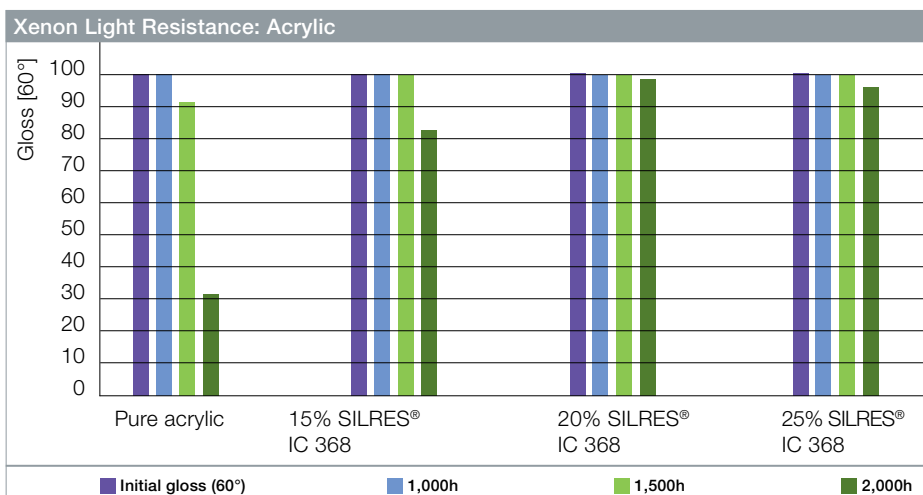
SILRES® IC 368 is ideal for cooking with acrylic resins to produce binders. Just 15% improves the weathering resistance considerably without affecting mechanical properties such as hardness or adhesion.

The chemical link to the OH-functional acrylic polymer results in an almost water-clear silicone-acrylic resin that is ideal for clear coats in high-quality applications.

The results speak for themselves. SILRES® IC 368 retains gloss for longer under UVA exposure and improves weathering resistance. This extends the durability of the coating in outdoor applications, and reduces the need for repairs and repainting – helping to conserve valuable resources.



Benchmark: isocyanate-crosslinked acrylic with competitor A and SILRES® IC 368



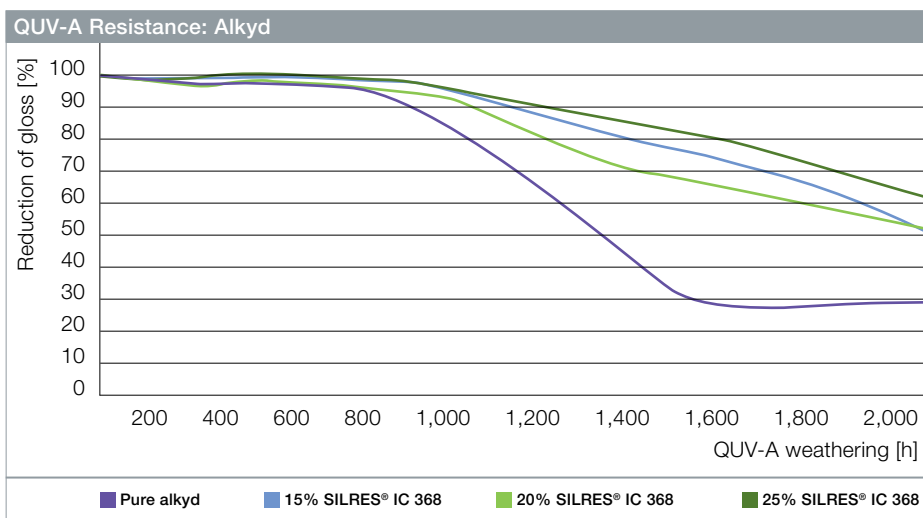
Xenon light resistance: gloss (60°) retention white acrylic paint formulation

# BRILLIANT – PERFORMANCE IN ALKYD PAINTS

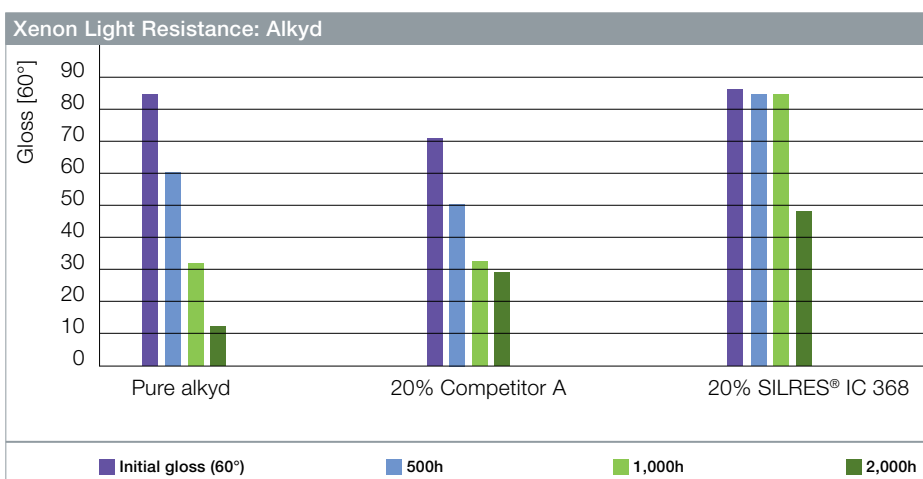
SILRES® IC 368 can also be readily cooked with alkyd resins. The resulting coatings show 15% improved values in weathering tests.

Another advantage of using SILRES® IC 368 is that the siliconized alkyd obtained can have a significantly lower viscosity, about one-third of the viscosity obtained when using silicone resins in flake form. The hybrid resins achieve extremely high solids contents.

SILRES® IC 368 makes it so much easier to formulate low-VOC coatings, and so helps you to meet emission standards.



QUV-A resistance: reduction of gloss (60° angle) white alkyd paint formulation.



Benchmark: middle oil alkyd with competitor A and SILRES® IC 368.

# SILRES® IC 368 –

## THE SECRET OF BRILLIANT COATINGS

SILRES® IC 368 is a methyl-phenyl-based silicone oligomer that can be chemically bound to an organic binder. It is a low-viscosity, solvent-free (<0.2%) liquid. It is used to produce organosilicone binders that permit the efficient formulation of highly weathering-resistant, low-VOC coatings.

### The Advantages

- Improved long-term stress and cold-check resistance
- Better corrosion protection
- Enhanced weathering and chemical resistance
- Reduced solvent content
- Shorter reaction time during cooking
- High efficiency

SILRES® IC 368 can be cooked with polyester resin to produce binders with a silicone content of more than 50% that are resistant to temperatures in the 300 °C range.

### Typical Applications

Coil-coating for outdoor applications (facade sheeting); protective wood paints for outdoor applications; exterior coatings for cooking utensils.



#### Properties of SILRES® IC 368

##### Typical General Characteristics

Appearance	Clear light-straw-colored liquid
Total silicone content	84 wt. %
Alkoxy content	~ 15 wt. %
Viscosity (dyn. at 25 °C)	~ 300 – 600 mPa s
Density (at 20 °C)	1.14 g/cm <sup>3</sup>
Volatiles (5g at 150 °C for 1h)	< 2 wt. %





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