SUNSTAR

Engineering Americas



Global Locations

North America

- 1. Sunstar Engineering Americas plant 1 Sales, R&D, & Manufacturing
- 2. Sunstar Engineering Americas plant 2 Manufacturing

Asia

- Sunstar Engineering Japan Sales, R&D, & Manufacturing
 Sunstar Engineering China
- Sales, R&D, & Manufacturing
- 5. Sunstar Engineering Thailand Sales, & Manufacturing
- 6. Sunstar Engineering Singapore Sales

Europe

- 7. Sunstar Engineering Europe Sales, R&D, & Manufacturing
- 8. Sunstar Engineering Italy Sales



Sunstar's Focus

Leading supplier to the automotive industry for more than 50 years

Research & Development and Manufacturing facilities around the world

Supply to different industries with emphasis on advanced products

Strong customer focus and unmatched flexibility continue to make Sunstar a market leader in client support

Responsiveness with unmatched flexibility

Design and manufacture of environmentally friendly products designed to continuously improve durability, quality, and safety of the vehicle



Assembly Shop Products

Solvent-Based

Pre-coat

One-component

Two-component

Pre-treatment to PP substrates NOT required

Water-Based

One-component

No mixing required

No pot life

Dries in 2 minutes or less

Passes Toyota, BMW and GM Cycle M Testing



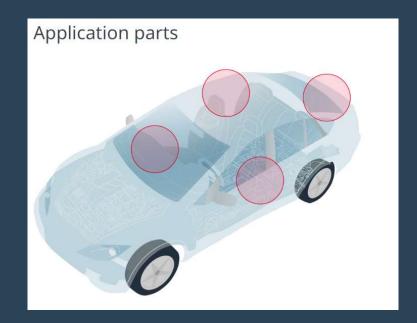






Penguin Cement 321LH & 323LH

- Penguin Cement 321LH and 323LH are our highest demand adhesive when it comes to new projects.
 - Advantages
 - Bond to Non-Treated PP substrates
 - 1 Component (Does Not Require additional materials)
 - On certain substrates combinations, one side apply may only be needed (150-175 grams per square meter)
 - Bond line can actually be at room temperature (no heated tool, longer workability window)
- Applications
 - Door upper and Armrest
 - Center console
 - IP parts (dashboard and ornaments)
 - Roof and seat



Water Based Adhesive (Penguin Bond 1912)

Sunstar has developed and currently manufacturing Penguin Bond 1912.

This is a one component water base adhesive to replace two component water base systems:

- No need to mix in dangerous isocyanates
- Less waste (infinite pot life instead of 2-8 hour pot life)
- Bonds Vinyl and other cover stocks to plastic and 3-D (Mueller) spacer fabric
- Applications
 - Door upper and Armrest
 - Center console
 - IP parts (dashboard and ornaments)
 - Roof and seat





Non-Reactive Hot Melts

Sunstar has developed a Non-Reactive Hot

Melt which can be pre-coated (roll coated or sprayed) to TPO or PU Foam and other cover stocks:

- Can Be Applied to Foam Bi-Laminate and have a shelf life of 4-6 months
- Interior Maker would only need one roll coater to apply to the substrate



THANK YOU