



# TECHNICAL LEAFLET

SUNSTAR ENGINEERING INC.

## One-part Moisture Cure Urethane Sealant PENGUIN CEMENT # 551

**Penguin Cement # 551** is a one-part moisture cure urethane sealing compound for direct glazing use of automobile windshield.

### a). Characteristics

1. Meets FMVSS212 and 216
2. Fast cure at room temperature
3. High bonding strength and good bonding durability with use of body primer 435-98 and glass primer 435-40 (provided)

### b). Applications

1. Flow gun will be used with high pressure drum pump at 59:1 ratio
2. #551 is high moisture sensitive; therefore pumping system should be entirely isolated from moisture.
3. Proper primers, 435-98 for painted window opening and 435-40 for glass, should be used

### c). Physical Properties

Appearance	: Black Paste
Viscosity (20°C)	: 80 Pa.s
Specific Gravity	: 1.30
Non-Volatile Content (%)	: 97.0 %
Sagging	: 0-1 mm
Tensile Strength (kg/cm <sup>2</sup> )	: 53
Tear Strength (kg/cm <sup>2</sup> )	: 28
Hardness (160°C, 15 min's)	: 49
Elongation	
Initial	: 500 %
After heat aging 90°C/ 14 days	: 350%

Cure rate tack-free time (min)	
5°C, 50% RH	: 145
20°C, 65% RH	: 37
35°C, 90% RH	: 6
Bonding Strength in shear (kg/cm <sup>2</sup> )	
Initial	: 42
Heat Aging 90°C/ 14 days	: 48
Water Immersion 40°C/14 days	: 43
Sunshine Weather-o-meter (1000hrs)	: 45

**d). Usage**

Use high-pressure pump and extrude with flow gun.

**e). Precautions**

1. Keep at cool and dark place
2. In case of skin contact, wash thoroughly with soap and water
3. In case of eye contact, wash out with water for more than 15 mins and immediately get medical care
4. If swallowed, immediately call a doctor

**f). Packaging**

Drum	240kg
Pail can	24kg
Cartridge	333ml