



TECHNICAL LEAFLET

SUNSTAR ENGINEERING INC.

Non-Solvent type Mastic Adhesive PENGUIN CEMENT # 1556A

Penguin Cement # 1556A is a synthetic rubber based non-solvent mastic adhesive, which is designed especially for hood and trunk lid of automobiles. It provides excellent elasticity and bonding performance as an anti-fluttering adhesive.

a). Characteristics

1. Excellent adhesion and stability to oily steel.
2. Excellent rust prevention.
3. No threading and excellent workability.
4. Excellent shower resistance.

b). Applications

1. Anti-fluttering adhesive to bond outer panel and inner panel of hood, trunk lid, door etc of automobiles.
2. An adhesive/sealant to seal jointed parts.

c). Physical Properties

Appearance	: White Paste
Viscosity (20°C)	: 3,200 Pa.s
Specific Gravity	: 1.36
Non-Volatile Content (%)	: 99 %
Sagging	: 0 mm
Slipping on Oily Surface	: No Slip
Hardness (160°C, 15 min's)	: 20
Elongation	: 250 %
Rust Prevention	: No Rust Observed
Shear Strength (mPa)	

	Oily Steel
Initial	750 CF
Heat-Aging	1050 CF
Water Resistance	750 CF

CF = Cohesive Failure

d). Test Method

Viscosity	: BS Type No. 7 rotor x 2 rpm
Non-Volatile Content	: 105°C x 3 hrs
Sagging	: Shape of material is 10mm x 100mm x 3mm Setting angle is 70 degree Setting time is 20°C x 30 min
Slipping on Oily Surface	: After applying approx. 3g of Penguin Cement # 1556A to oily steel panel (quantity of oil: approx 2g/m ²), set the steel panel vertically and check slipping of # 1556A.
Hardness	: JIS-A Hardness
Curing Condition	: 160°C x 15 min
Shear Strength	
Thickness of adhesive layer	: 3mm
Lap	: 25 x 25 mm ²
Cross-head speed	: 50 mm/min
Curing Condition	: 160°C x 15 min
Aging Condition	
Heat Aging	: 100°C x 2 weeks
Water Resistance	: 40°C x 1 week
Elongation	: #2 dumb bell
Cross-head speed	: 50mm/min
Curing Condition	: 160°C x 15 min
Rust Prevention	: Salt water spray test for 480 hrs

e). Usage

Use high pressure pump and extrude with flow gun.

f). 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

g). Packaging

Drum	220kg
Pail can	20kg