

B483 / B7552

PRINT & PROTECT (PNP)

Description

Designed for applications where the highest demands on durability and/or chemical resistance is required. The PNP-construction B483 / B7552 is designed for high adhesion to textured metals, powder coated surfaces and low surface energy plastics.

Material	White polyester B483	Overlaminating material	Clear polyester B7552
Finishing	Glossy	Overlaminating finish	Glossy
Adhesive	Permanent rubber based	Overlaminating adhesive	Permanent acrylic

Technical data

Physical properties

	Test methods	Average results
Thickness White polyester	ASTM D 1000 - Substrate - Adhesive	0,051mm (0.002inch) 0,051mm (0.002inch)
Overlaminating polyester	- Substrate - Adhesive	0,051mm (0.002inch) 0,023mm (0.0009inch)
	- Total	0,176 mm (0.0069inch)
Adhesion to: - Stainless steel	ASTM D 1000 20 minute dwell time 24 hour dwell time	169 N/100mm (155oz/inch) 174 N/100mm (160oz/inch)
- PVC	20 minute dwell time 24 hour dwell time	158 N/100m (145oz/inch) 166 N/100mm (152oz/inch)
- Textured ABS	20 minute dwell time 24 hour dwell time	55 N/100mm (60oz/inch) 54 N/100mm (59oz/inch)
- Polypropylene	20 minute dwell time 24 hour dwell time	140 N/100mm (153oz/inch) 143 N/100mm (156oz/inch)
- Painted enamel	20 minute dwell time 24 hour dwell time	157 N/100mm (144oz/inch) 162 N/100mm (149oz/inch)
- Powder coated metal	20 minute dwell time 24 hour dwell time	111 N/100mm (102oz/inch) 113 N/100mm (104oz/inch)
Tack	ASTM D 2979 Polyken™ Probe Tack 0,5 second dwell time	1122 g (39oz)

Performance properties

Printed samples of B483 overlaminated with B7552 were laminated to aluminum before exposure to the indicated environmental condition.

	Test methods	Average results
Long term high service temperature	30 days at 120°C (194°F)	No visible effect
Long Term Low Service Temperature	30 days at -40°C (-40°F)	No visible effect

Humidity resistance	30 days at 37°C (100°F), 95% R.H.	No visible effect
UV resistance	30 days in Q-Sun Xe-1, 0,35W/m ² @340nm, black temperature 63°C	Yellowing of the label construction Print still legible
Weathering resistance	ASTM G53 (30 days QUV)	Yellowing of the label construction Print still legible

Chemical resistance

Tests were conducted after 24 hours dwell time. Testing was conducted at room temperature and consisted of 30 minutes immersion in the specified test fluid. After immersion, the samples were removed from the test fluid and visual inspected.

Chemical reagent	Observation of visual change after removal from test fluid
Methyl Ethyl ketone	Very slight adhesive ooze
Toluene	No visible effect
Isopropyl Alcohol	No visible effect
MIL 5606-oil	No visible effect
Skydrol 500B-4	No visible effect
JP-4 Jet Fuel	Very slight adhesive ooze
ASTM#3 Oil	No visible effect
N-Hexane	No visible effect,
Acetone	Edges of overlaminates are coming loose
DOT-4 break Fluid	No visible effect
Gasoline	No visible effect
Diesel	No visible effect
Alcohol Mixture*	No visible effect
De-ionized Water	No visible effect
NaCl (10%)	No visible effect
H ₂ SO ₄ (37%)	No visible effect

* Alcohol Mixture: 50% Methyl alcohol, 30% Ethyl alcohol, 20% Water

Trademarks

ASTM: American Society for Testing and Materials (U.S.A)

SAE: Society of Automotive Engineers (U.S.A)

Polyken™ is a trademark of Testing Machines Inc.

Skydrol® is a registered trademark of the Monsanto Company

S.I.: International System of Units

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