



**Technical Data Sheet**

# Adhesion Promoter N200

**General Information**

N200 is a type of adhesion promoting primer which provides a superior adhesion by reacting with moisture in the air. It can be used in conjunction with 3M double-coated tapes, especially Acrylic Foam Tape, for adhering to Polyvinyl Chloride (PVC), Acrylonitrile Butadiene Styrene copolymer (ABS) and Polyurethane (PU) etc..

**Configuration**

* Appearance	: Transparent yellow liquid
* Solid material	: Synthetic resin
* Solvent material	: Toluene and Ethyl Acetate
* Unvolatilized material	: Approximately 4.5 %

\* N200 is the same as a ten times diluted C100 primer.

**Test results 1 : #4211 180 ° Peeling strength (N/25mm (kgf/25mm))**

Substrates	PVC		ABS	
	N200	None	N200	None
Initial state	42.1 (4.3)	24.5 (2.5)	42.1 (4.3)	20.6 (2.1)
Normal state	43.1 (4.4)	31.4 (3.2)	43.1 (4.4)	23.5 (2.4)
At high temperature	20.6 (2.1)	12.7 (1.3)	20.6 (2.1)	14.7 (1.5)
Heat aging	41.2 (4.2)	10.8 (1.1)	47.0 (4.8)	30.4 (3.1)
Warm water immersion	41.2 (4.2)	27.4 (2.8)	41.2 (4.2)	29.4 (3.0)

**Test results 2 : Primer drying time and 180 ° Peeling strength ((N/25mm) kgf/25mm))**

	Drying time							
	1 minute	10 minutes	1 hour	4 hours	12 hours	1 day	3 days	7 days
Initial state (1 minute)	8.8 (0.9)	21.6 (2.2)	34.3 (3.5)	35.3 (3.6)	35.3 (3.6)	35.3 (3.6)	33.3 (3.4)	28.4 (2.9)
Normal state (24 hours)	43.1 (4.4)	43.1 (4.4)	43.1 (4.4)	43.1 (4.4)	43.1 (4.4)	43.1 (4.4)	43.1 (4.4)	39.2 (3.9)

\* In the case of a long drying time, the adhesion strength becomes low.

If the primer drying time passes over 24 hours, please re-apply the N200 primer again.

**Usage** Attachment of auto parts which needs high adhesion to PVC, ABS or PU etc.

## Test materials

- (1) Tape : #4211 Acrylic foam tape (1.2mm thickness)
- (2) Primer : N200
- (3) Substrates : PVC plate for a body side molding and ABS plate

## Test methods <180 ° peel strength>

Peel off tape in 180 ° direction and measure the adhesion to the PVC panel with a tensile strength test machine after the exposure in the following conditions.

- a) Initial state : 23 ° x 20 minutes
- b) Normal state : 23 ° x 24 hours
- c) At high temperature : b) at 80 °
- d) Heat aging : b) 80 ° x 336 hours b)
- e) Warm water immersion : b) 40 ° water x 336 hours b)

\* Tape size : 25mm width, \* Rolling pressure : 5kg roller one-way, \* Peeling speed : 50 mm/minute

## Primer application procedures

- (1) Surface treatment : The primer coated surface is first cleaned with an appropriate solvent (Isopropyl alcohol (IPA) or toluene etc.), thus removing contamination or releasing agent, etc. from the surface.
- (2) Primer coating : Coat the primer uniformly to the part surface with a clean felt or brush, etc.. The amount of primer coating varies depending on the material and surface condition.
- (3) Drying time : In general, the drying time under standard conditions (23 ° and 65% relative humidity) is 30 seconds to 24 hours. Drying time varies depending on the ambient temperature and humidity, as well as the amount of coating. Recommended drying time is 10 minutes to 3 hours under standard conditions. If the primer drying time passes over 24 hours, please re-apply the N200 primer again.
- (4) Tape attachment : Apply the double-coated tape to the primer coated surface and be sure to apply sufficient pressure with a roller or hand pressure. The tape cannot be re-applied. Heat the part surface with a heater in winter (at lower than 15 °).

## Notices

- (1) Please use the primer within one day after decanted to a small container because of a moisture reactive type.
- (2) Please apply the primer in a well -ventilated area.
- (3) After opening, please store the primer in a tightly sealed container in a well ventilated area.
- (4) This product is volatile and contains moisture reactable contents. It may be harmful and poisonous if inhaled

or

it comes in contact with the skin. To prevent accidents, please follow the handling procedures/precautions attached with the primer.

WARNING ! * Highly flammable. * Harmful by inhalation.
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\* Irritating to eyes, skin and respiratory system.

\* May cause sensitization by inhalation.