ETERNAL MATERIALS CO., LTD.

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Acrylic Polyol Polyurethane Coating

ETERAC 7307-2-S-70 is a hydroxyl functional acrylic copolymer designed to crosslink at room temperature with polyisocyanate adducts. This resin has been primarily developed to produce two packs system with the following outstanding features.

- Excellent chemical and stain resistance
- Excellent adhesion
- High gloss
- Excellent film builds and colour retention
- Excellent chemical and acid resistance

SPECIFICATION

Appearance	Clear / Clean
Color (APHA)	<=50
Viscosity (Gardner 25℃)	Z_2 - Z_4
Solid Content, % (150℃ x 30')	70 ± 1
Hydroxyl Value (mg KOH/g, solid)	132~148
(Hydroxyl Equivalent Weight on solid	400)
Acid Value (mg KOH/g, solid)	8 ~14
Water Content, %	<=0.1
Solvent	Butyl acetate

SUGGESTED FORMULATION

I. PU top clear

Part A

ETERAC 7307-2-S-70	50.6
BYK 301 (10% in Xylene)	1.0 (leveling Agent)
DBTDL (10% in Xylene)	0.2
CHISORB 328 (10% in Xylene)	5.2
CHISORB 328 (10% in Xylene)	3.2
Thinner	39.8
	100.0

Part B

Desmodur N-3390	20.3
Thinner	29.7
	50.0

Formulation Ratio

Part A / Part B = 1.0/1.0

NCO/OH = 1.05

II. PU top (White)

Part A

ETERAC 7307-2-S-70	40.0
Titanium dioxide (R-900)	28.0
BYK-301 (10% in Xylene)	1.0 (Leveling agent)
DBTDL (10% in Xylene)	0.2
CHISORB 328 (10% in Xylene)	4.3
CHISORB 328 (10% in Xylene)	2.6
Thinner	23.9
	100.0

Part B

Desmodur N-3390	16.0
Thinner	62.0
	78.0

Formulation ratio

Part A / Part B = 1.0 / 1.0

Pigment / Binder = 1.0 / 1.76

Thinner

Xylene	50.0
Butyl acetate	25.0
Solvesso 100	12.5
Propylene glycol monomethyl ether acetate	12.5
	100.0

TYPICAL PERFORMANCE DATA

White Enamel : Spray on Cold roll steel treated with Bonderlite #144
Spray viscosity : Ford cup #4 18"-22" 25℃
Dry film thickness 30~35μ
Baking 60℃ x 30 mins. and 7 days setting at 25℃

Drying Time :	
Set to touch (min)	12'31"
Tack free (min)	80'50"
Dry hard (min)	120
Hardness (pencil)	H
Gloss (20°/60°)	91.3/94.2
Impact (1/4 inch, 500g)	50cm
Adhesion	100/100
Resistance to	
5% H_2SO_4 (25℃/24hrs)	Excellent
5% NaOH (25℃/24hrs)	Excellent
Gasoline (25℃/24hrs)	Excellent
MEK (double rub/time)	~100