

## EPOKEY 820-40CX

EPOKEY 820-40CX is the high molecular weight epoxy resin used as a primer especially for PCM. As this product is modified by blocked isocyanate to make cross-linking, it shows performance fully by baking. ( Heat initiate over 150°C).

### ◆ FEATURES

- Excellent workability : one component
- Excellent adhesion for metal
- Excellent corrosion resistance
- Excellent chemical resistance

### ◆ SPECIFICATION

	820-40CX
Appearance	Clear, Yellow
Non-Volatile (%)	40±1.5
Viscosity (GH/25°C)	T ~ X
Internal solvent (%)	
Xylene	40
PMA	27
n-Butanol	20
MA	13

MA : 3-Methoxy butyl acetate

PMA : Propylene glycol mono methyl ether acetate

## ◆ FILM PROPERTY TEST

### Formulation (primer)

EPOKEY 820-40CX .....	60.0
TiO <sub>2</sub> .....	12.0
Zinc Potassium Chromate .....	6.0
Strontium Chromate .....	6.0
Thinner * .....	16.0

Thinner \*: Xylene / PMA / n-butanol = 50 / 25 / 25

Disperse by paint shaker

Add thinner to adjust viscosity 12 ~ 15 sec/IWATA

### Formulation (top coat)

ALMATEX P646 / U-Van 20SE60 / EP#1001 = 80 / 15 / 5 by solid

#### <Grinding Base>

Almatex P646 .....	15.0
TiO <sub>2</sub> .....	2.0
Dye (Phthalocyanine Blue) .....	10.0
Dye (Phthalocyanine Green) .....	1.5
Thinner ** .....	7.0

Be dispersed by tree roller mill

#### <Let down>

Grinding Base .....	38.0
Almatex P646 .....	35.0
U-Van 20SE-60 .....	14.3
EP#1001 (50%/XY) .....	8.6
Thinner ** .....	12 ~15 sec/IWATA

Thinner \*\* :

SOL#150 / n-butanol / Butyl cellosolve / MIBK  
= 30 / 10 / 30 / 30

### Coating Schedule

#### <Primer coating>

Substrate	: BNT#3300 (t=0.3mm)
Setting	: 10sec + curing:280°C/30sec
Thickness	: 4-5 μ /dry

#### <Top coating>

Setting	: 10sec + curing:280°C/50sec
Thickness	: 13-15 μ /dry

Test Results

	Result
< <b>Physical Properties</b> >	
<b>Pencil Hardness</b>	<b>H ~ 2H</b>
<b>Cross cut adhesion</b>	<b>100/100</b>
<b>Du Pont Impact</b> (1/2'Ø, 1kg)	<b>&gt;50cm</b>
< <b>Corrosion resistance</b> >	
<b>Salt Spray test</b> <b>500Hrs</b> <b>1000Hrs</b>	<b>Excellent</b> <b>Excellent</b>
< <b>Bending test</b> >	
<b>0T</b>	<b>Good</b>
<b>1T</b>	<b>Excellent</b>
<b>2T</b>	<b>Excellent</b>

◆ **SOLVENT TOLERANCE**

Solvent	ml / g	Solvent	ml / g
IPA	0.5	PMA	2.0
n-butanol	0.6	PE	4.5
Ethyl acetate	0.6	PEAC	0.4
Butyl acetate	0.4	Cellosolve acetate	∞
MEK	2.8	Ethyl cellosolve	∞
MIBK	0.6	Butyl cellosolve	∞
Cyclohexanone	∞		
<b>Xylene / PMA / Cyclohexanone / n-butanol = 4 / 2 / 2 / 2</b>			∞
<b>Xylene / PEAC / n-butanol = 4 / 4 / 2</b>			∞
<b>Xylene / MA / n-butanol = 4 / 4 / 2</b>			∞

PMA : Propylene glycol mono methyl ether acetate

PE : Propylene glycol mono ethyl ether

PEAC : Propylene glycol mono ethyl ether acetate