

**Industrial coating**  
**2K Soft feel lacquer**  
**without matting agent based on urea methanal condensate**  
**Desmophen 670//1150//1652 and Desmodur N 75**

<b>Basis</b>	Polyurethane			
				PCO-0017e-SF
				A      B
<b>Component A</b>	Guide Formulation of Covestro			
	Desmophen 670	75 % in butyl acetate:xylene	(1)	21.5    20.6
	Setathane D 1150	75 % in butyl acetate:xylene	(2)	21.5    ---
	Desmophen 1652	75 % in butyl acetate:xylene	(1)	---    20.6
	Inorganic pigment			15.5    13.5
	SILLITIN Z 86 PURISS )*		(3)	7.4    6.2
	Matting agent		(4)	3.9    3.3
	Bentone 38	10 % swelling )**		3.9    3.4
	Dibutyl-tin-dilaurate	1 % in butyl acetate		2.0    1.7
	Butyl acetate:xylene	1:1		24.3    30.7
<b>Component B</b>	Desmodur N 75 BA		(1)	22.5    14.0
	Total parts by weight			122.5    114.0
	)* or SILLITIN Z 89 PURISS for bright color formulations			
	)** <u>10 % Bentone swelling:</u>			
	Bentone 38	10.0	(5)	
	Anti-Terra-U	5.0	(6)	
	Solvesso	85.0		
	prepare by stirring (15 m/s, 10 min)			
<b>Composition in % (approx.)</b>	Binder			40.3    36.3
	Solvent			37.5    43.2
	Pigment			12.7    11.8
	Filler			6.0    5.4
	Matting agent			3.2    2.9
	Additives			0.3    0.3



PCO-0017e-SF

A B

		A	B	
<b>Technical Data</b>	NCO / OH	1.0	1.0	
	Solids content	%	60	55
	Viscosity (DIN 53211, 4 mm flow cup, 23°C)	s	22	22
	Flow time doubled after	min	150	150
	Pot life, 23°C (closed container)	h	8	8
	Gloss degree (Gardner 60°, on glass)	%	10	10
	Touch-dry after (80 µm dry film thickness, 80°C)	min	30	30
	Flash point (DIN 53213)	°C	26	26

**Mixing** The formulation can be prepared with a sand-, bead- or triple roll mill

**Processing** The formulations are suitable for air pressure spray application (2-4 bar, 0.8-2.0 mm nozzle). 2K equipment is recommended for on-line application. To obtain a pleasant soft feel on hard thermoplastics, the dry film thickness should be approx. 80 µm.

**Pre-treatment of substrate** In most cases, no special pre-treatment is necessary. Any dirt (e. g. dust, hand sweat) can be removed with ethanol or white spirit.

**1-coat application** The finishes adhere well on the following plastics:

- ® Baydur (rigid PU foam)
- ® Bayflex (semi-rigid PU foam)
- Noryl GTX (PPO/PA)
- PVC

**2-coat application** For coating plastics which are sensitive to solvents (e.g. ABS, PC, etc.), the application of a primer formulated with mild solvents is recommended.

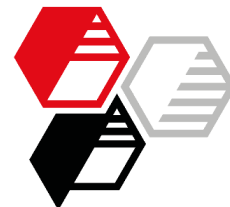
The following are particularly suitable:

- Desmolac 4125 ® – PCO-0007-PS (1K formulation)
- Desmodur N / Desmophen 1200 – RR PCO-0033C-PS (2K formulation)

The primers are very flexible and adhere well on many plastics. They also provide a barrier against attack by the solvents in the soft-feel finish and thereby prevent stress cracking.

A 2-coat system including primer formulation PCO-0033C-PS has good substrate and intercoat adhesion on the following thermoplastics:

- Bayblend® (ABS/PC)
- Durethan® (PA)
- Makroblend® (PC/PBTP)
- Makrolon® (PC)
- Novodur® (ABS)
- Pocan® (PBTP)
- Polystyrene (PS)



PCO-0017e-SF  
A B

**Film characteristics:**

Soft-feel finishes take away the cold hard look of rigid plastic moldings and give them the feel of flexible PU foam or expanded flexible PVC. They also have sound-absorbing properties.

**Heat resistance:** min. 96 h at 130°C

**Solvent resistance:**

(premium-grand petrol, xylene, butyl acetate, MPA, methanol)  
1 min application with saturated wadding very good

**Cold Check Test:**

(+50°C/-22°C/+20°C/25 cycles) no cracking

**Immersion in water:**

(6 months) no blistering

**Humidity test:**

DIN 50017, 1000 h no blistering

**Abrasion test:**

(Taber-Abraser/CS 10/500 rev.) < 5 mg weight loss

**Suppliers**

- (1) Covestro
- (2) Allnex
- (3) HOFFMANN MINERAL
- (4) Evonik Industries, z. B. Acematt OK 412 oder Acematt TS 100
- (5) Elementis
- (6) Byk Chemie

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