BTX-FREE · FOR AUTOMOTIVE EXTERIOR & INTERIOR PARTS

Ecoplus G81

Quick-Drying 2-Component Acrylic Urethane Coating (2K)

Touch-dry performance comparable to 1K lacquer

ISO 9001:2015 Certified (Intertek)

TAIEI INDUSTRIES Co.,Ltd. TECHNO PAINT CHEMICALS SECT.



Example ① Ecoplus G81, Gold (customer-specific color)



Example ④ Ecoplus G81, Silver (customer-specific color)

BTX-FREE · FOR AUTOMOTIVE EXTERIOR & INTERIOR PARTS

Ecoplus G81

Quick-Drying 2-Component Acrylic Urethane Coating (2K)

Product Description

An environmentally considerate, TX-free two-component reactive acrylic urethane that contains no toluene or xylene, solvents with a high environmental load. Its key strengths are chemical resistance, tack resistance and light resistance (FOM). It dries quickly, with touch-dry performance comparable to 1K lacquer, and offers excellent workability.

BTX-Free
No toluene or xylene

Quick Drying
Touch-dry like 1K lacquer

Chemical & Tack Resistance
Excellent light resistance (FOM)

SWOM 1000 h
Gloss retention ≥ 85%

TAIEI INDUSTRIES Co., Ltd.

We are a paint manufacturer specializing in the development and production of metallic paints for OEM automotive exterior and interior parts.

Head Office & Factory
1-1-3 Hayabuchi, Tsuzuki-ku, Yokohama-shi,
Kanagawa-ken 224-0025, Japan
TEL +81-45-591-2121 FAX +81-45-591-2124

Gifu Sales Office
1-34-1 Hottsu-cho Yokote, Hashima-shi,
Gifu-ken 501-6331, Japan
TEL +81-58-398-3794 FAX +81-58-398-4041

Web: https://www.taiei-sangyo.jp E-mail: info@taiei-sangyo.jp

Painting Specification

Item	Conditions
Mixing ratio (by weight)	100 / 10 / 100–120 Paint / Hardener / Thinner Varies by color and hardener type
Pot life (after mixing)	8 hours
Paint viscosity (diluted)	13 ± 3 sec Anest Iwata NK-2 cup, 23°C Varies by color
Atomizing air pressure (spray gun)	0.2–0.3 MPa
Standard film thickness	15–20 µm
Standard drying condition	70°C × 30 min

Recommended System

Item	Details
Substrates	ABS, PC/ABS
Hardener	Ecohard D-50 Standard type
Thinner (standard evaporation)	YD-319 PRTR-compliant 1019
Thinner (slow evaporation)	YD-319-S
Mixing ratio by hardener	Ecohard D-50: 100 / 10 / 100–120 The ratio may vary slightly by color

Paint Film Performance

Test item	Test method	Result
Film hardness	Mitsubishi Hi-Uni pencil	**F**
Initial adhesion	1.0 mm cross-cut, adhesive tape peel	**100/100**
Impact resistance	DuPont impact tester, 2.9 N (300 gf), 20 cm or more	**PASS**
Tack resistance	Gauze, 70°C × 2 h, 500 gf, ⌀40 mm	**PASS**
Adhesion after humidity exposure	50°C, 98% RH, 240 h, then adhesion test	**100/100**
Water discoloration resistance	5 ml distilled water dropped inside a ring sealed to the test surface; 55°C × 4 h	**ΔE* ≤ 0.8**
Alkali resistance	5 ml NaOH (0.1 N) dropped inside a ring sealed to the test surface; 55°C × 4 h	**ΔE* ≤ 1.5**
Acid resistance	5 ml H_2SO_4 (0.1 N) dropped inside a ring sealed to the test surface; 23°C × 24 h	**ΔE* ≤ 1.5**
Volatile oil resistance	Immersed in No. 1 volatile oil at room temperature (20°C) for 3 h	**PASS**
Dry rubbing fastness	Gakushin-type rubbing tester, 5 layers of gauze, 500 g load × 200 cycles	**PASS** No substrate exposure
Alcohol-based hair liquid resistance	Hair liquid (1 g/100 cm²), 80°C × 168 h, then abrasion test (2 kg × 200 cycles)	**PASS** No substrate exposure
Beef tallow resistance	Beef tallow (2 g/100 cm²), 80°C × 168 h, then abrasion test (2 kg × 200 cycles)	**PASS** No substrate exposure
Sunscreen resistance	Sunscreen cream (0.5 g/100 cm²), 55°C × 4 h, then abrasion test (2 kg × 200 cycles)	**PASS** No substrate exposure
Light resistance	FOM (fade meter), 400 h	**Gloss retention ≥ 90%** **ΔE* ≤ 3.0**
Accelerated weathering	SWOM (sunshine weather meter), 1000 h	**Gloss retention ≥ 85%** **ΔE* ≤ 3.0**