



移印油墨产品目录



# Special Environmentally Compatible Formulations Pad Printing Ink Series / 环保配方移印油墨

## FREE of / 不含:

- **Aromatics**  
芳烃
- **Bisphenol A (BPA)**  
双酚A
- **Butyl Glycolate (GB Ester)**  
羟基乙酸丁酯
- **Cyclohexanone**  
环己酮
- **Phthalates**  
邻苯二甲酸盐
- **Polycyclic Aromatic Hydrocarbons (PAH)**  
多环芳香烃
- **Solvent Naphtha**  
溶剂石脑油



- ✓ All ink series meet the requirements of EN 71-3:2013 (Toy Standard) / 所有油墨系列符合 EN 71-3:2013 玩具安全标准要求。
- ✓ TPEV and TPN have USP Medical Class VI certification (medical devices) / TPEV 和 TPN 油墨具有 USP Medical Class VI 医疗设备安全认证。
- ✓ TPHF is free of halogens according to DIN EN 61249-2-21 / TPHF 油墨根据 DIN EN 61249-2-21 标准，不含卤素。

## TPEV USP Medical Class VI Test

New formulated with especially environmentally-compatible raw materials to be in line with current safety requirements. Excellent adhesion, high glossy. Wide application on many different substrates for rigid PVC, PMMA, polycarbonate (PC), polystyrene (PS), polypropylene (PP), polyethylene (PE), polyacetal (POM), polyester, duroplastics, metals and coated substrates.

新配方油墨，配有特别环保的原材料，符合安全要求。良好附着力。高光泽。广泛应用在不同基质上，适用于硬质聚氯乙烯(PVC)、聚甲基丙烯酸甲酯(PMMA)、聚碳酸酯(PC)、聚苯乙烯(PS)、聚丙烯(PP)、聚乙烯(PE)、聚乙醛(处理后)、聚酯、硬塑料、金属和涂层表面。



## TPHF (Halogen Free / 无卤素)

Quick drying, excellent abrasion resistance, weather resistant, good processing properties, high gloss, good resistance against benzines and alcohol especially with hardener. For all kinds of thermoplastics, especially for ABS, polystyrene (PS), rigid PVC, PMMA, polycarbonate (PC), polyester, polyamide (PA) and other duroplastics pre-treatment (corona or flame treatment) may be required.

快速干固油墨，高度耐磨性，抗候性，良好加工特性，高光泽，对苯和酒精有良好抗性，特别是添加了硬化剂后。适用于各种热塑料，特别是丙烯青-丁二烯-苯乙烯共聚物(ABS)、聚苯乙烯(PS)、硬质聚氯乙烯(PVC)、聚甲基丙烯酸甲酯(PMMA)、聚碳酸酯(PC)、聚酯、聚酰胺(PA)和其他硬塑料需要(电火花或火焰)预处理。



## TPK

2-component, very high glossy, good opacity, high chemical and outdoor resistance. For printing onto pre-treated polyolefines such as polyethylene (PE) and polypropylene (PP), thermoplastics (ABS, acrylics), metals, duroplastics and epoxy resins.

双组分移印油墨。十分高光泽，良好的不透明性，高化学和户外抗性。适用于印刷在预处理的聚烯烃，如聚乙烯(PE)和聚丙烯(PP)、热塑料(丙烯青-丁二烯-苯乙烯共聚物(ABS)、丙烯酸酯)、金属、硬塑料和环氧树脂。



## TPN USP Medical Class VI Test

Quick drying ink with weather resistant, high gloss. Good processing properties, good resistance against benzenes / alcohol especially when the ink is processed with hardener. Very high abrasion resistance. Wide application on all substrate especially for ABS, polystyrene (PS) and its copolymers, rigid PVC, PMMA and polycarbonate (PC).

快速干固油墨，抗候性。高光泽。良好的加工特性，添加了硬化剂后，对苯和酒精有良好抗性。表面硬度强，高耐磨。适用于各种热塑料，特别是丙烯青-丁二烯-苯乙烯共聚物(ABS)、聚苯乙烯(PS)、硬质聚氯乙烯(PVC)、聚甲基丙烯酸甲酯(PMMA)及聚碳酸酯。



## TPTM

Very quick drying, high initial adhesion, high abrasion resistance (excellent resistance against ethanol (alcohol) and petrol), on many substrates within a few minutes after printing. Excellent resistance against diesel fuel, hand cream and hand sweat. Excellent printing properties at very slow to extremely fast printing speeds.

For technical-industrial applications. Main substrates are ABS, SAN, ASA, polystyrene (PS), rigid PVC, PMMA and polycarbonate (PC), coated substrates, metals and plastic copolymers. (Hardener and/or pre-treatment of the substrate may be required.)

[此型号油墨暂不进口到中国市场销售。]



To ensure that all guidelines and limits are observed the appropriately suitable thinners, retarders, hardeners and additives must be selected for adjustment of these inks. 为了确保遵守所有准则和限制，必须选择合适的开油水(稀释剂)、慢干水、硬化剂和添加剂来调校这些油墨。

### Special Environmentally Compatible HARDENER / 环保配方硬化剂:

	TPEV	TPHF	TPK	TPN	TPTM
<b>HARDENER / 硬化剂</b>					
TPWH	10:1	8:1	4:1	10:1	10:1
TPWH/N	10:1	8:1	4:1	10:1	10:1
TPWH/EV	10:1				

### Special Environmentally Compatible THINNERS & RETARDERS / 环保配方开油水 (稀释剂):

Products / 产品	Evaporation rate / 挥发率	Factor / 数值	Solvent power / 溶解能力	Applicability / 适用性
TPWB/EV	Quick / 快	0.5	Medium / 中等	Universal / 普遍
TPWA	Medium / 中等	1	Medium / 中等	Universal / 普遍
TPWU	Medium / 中等	1	Medium / 中等	Universal / 普遍
TPWR/EV	Medium / 中等	3	Medium / 中等	Universal / 普遍
TPWD/EV	Very slow / 十分慢	25	Mild - Medium / 轻微 - 中等	Universal / 普遍

	TPEV	TPHF	TPK	TPN	TPTM
<b>Glossiness / 光泽度</b>	High / 高	High / 高	Very high / 十分高	High / 高	High / 高
<b>Drying speed / 干燥速度</b>	Medium / 中等	Quick / 快	Medium / 中等	Quick / 快	Very quick / 十分快

### Suitability Chart Ink / 油墨适用性参考表:

	TPEV	TPHF	TPK	TPN	TPTM
1- and alternatively 2-component / 单或双组分移印油墨	✓	✓		✓	✓
2- component ink / 双组分移印油墨			✓		
<b>Substrates / 基质</b>					
ABS / 丙烯青-丁二烯-苯乙烯共聚物		●	②	●	●
SAN / 苯乙烯-丙烯青共聚物					
Polystyrene (PS) / 聚苯乙烯		●	②	●	●
Polycarbonate (PC) / 聚碳酸酯	●	●	②	●	●
PMMA / 聚甲基丙烯酸甲酯	●	●	②	●	●
PVC-rigid / 硬质聚氯乙烯	●	●	②	●	●
PVC-plasticized / 塑化聚氯乙烯					●
Polyamide (PA) / 聚酰胺	②	②		②	②
Polypropylene (PP) pre-treated / 聚丙烯 - 预先处理	②	②	②	②	
Polyethylene (PE) pre-treated / 聚乙烯 - 预先处理	②	②	②	②	
Polyurethane (PU) / 聚氨酯	②		②		②
Polyacetal (POM) post-treatment / 聚乙醛 - 处理后	②		②	●	●
Polyester / 聚酯	②	②	②	②	②
Duroplastics / 硬塑料	②		②		
Metals / 金属	②		②		②
Coated Surfaces / 涂层	●	●	②	●	

● = Preferred for the application / 优先应用    ● = Suitable for the application / 适合应用  
② or / 或 ② = Processing with hardener as 2-component ink / 用硬化剂成双组分油墨



## TPQ

USP Medical Class VI Test

Quick drying, glossy, resistance to many organic solvents, chemicals, diluted alkalines and acids. Good resistance to mechanic abrasion. For duroplastics, glass, coated surfaces, metals and non-ferric metals, polyamide, polycarbonate, polyester, polymethacrylate, polyurethane and rigid PVC.

适合硬塑料、玻璃、涂层表面、金属、非铁金属、聚酰胺、聚碳酸酯、聚酯、聚氨酯、PMMA及硬质PVC。



## TPRB

Quick drying semi-gloss inks. The ink film is elastic and largely follows the contours of the substrate. For rubber, leather, imitation leather, polyamide and polyurethane.

具有快速干燥以及半光亮特性，油墨有弹性，可以很好地附着于基材上。这系列的色彩具有较强的无金属着色性。针对具弹性、软性物料表面，适用于橡胶、皮革、人造皮革、聚酰胺和聚氨酯。



## TPW

USP Medical Class VI Test

Quick drying, glossy, good opacity and printability. Ideal for rotary printing. For duroplastics, wood, coated surfaces, various metals, paper polyamide, polyacetal (post-treated), pre-treated polyethylene, polypropylene, polycarbonate, polyester, PMMA, polystyrene, polyurethane, rigid PVC, compact discs.

具快速干燥和光亮特性，适用于硬质塑料、木材、涂层、各种金属、纸聚酰胺、聚醚树脂(处理后)，预处理聚乙烯和聚丙烯、聚碳酸酯、聚酯PMMA、聚苯乙烯、聚胺基甲酸酯、硬质PVC以及光盘。色彩具有较强的无金属着色性，多应用于礼品项目(打火机、笔等)、家电塑料产品。更可配合硬化剂使用，令油墨耐磨性，附着力提升。



## AUXILIARY AGENTS / 周边产品

Use of various additives to adjust the pad printing inks to the different environmental conditions and printing requirements. 使用不同的周边产品调校移印油墨来配合不同环境因素及印刷需要。

### Solvents (Thinners) / 开油水 (稀释剂)

Solvents (Thinners) are used to adjust ink viscosity. 开油水 (稀释剂) 用作调较油墨浓度。

- TPWA
- TPWB
- TPWB/EV
- TPWC
- TPWR/EV
- TPWU
- TPFA
- CA262



### Hardeners / 硬化剂

Hardeners react chemically with ink. This reaction is initiated as soon as the hardener is mixed with the ink. 硬化剂用作与油墨混合使用，大大改善印刷附着力。

- TPWH
- TPWH1/2
- TPWH/N
- TPWH/N-00
- TPWH/GL
- TPWH-02/GL
- TPWH-03/GL
- TPWH/EV



## MEDICAL INSTRUMENT / 医疗用品

Kent pad printing ink : TPA, TPN, TPW, TPQ and TPEV with hardener TPWH meets the international requirements of biological test for plastics by "TOXIKON" ~ USP Medical Class VI certification. Ideal for medical product printing.

坚毅TPA, TPN, TPW, TPQ和TPEV等油墨系列及TPWH硬化剂已通过严格"TOXIKON"国际测试，USP Medical Class VI医疗设备安全认证，可安全应用于医疗用品器材上。

TOXIKON Leaders in Life Science and Technology TEST RESULT CERTIFICATE			
Spencer	Kent Engineering Company, Limited	Technical Initiation	7/13/20
Address	Block 2, 4/F., Wah Sing Ind. Bldg. 12-14, Wah Sing Street, Kwai Chung, N.T., Hong Kong, China	Technical Completion	7/22/20
Contact	Miriam Koo	Report Date	7/24/20
P.O. Number	Not Supplied by Spenser	Project Number	09-2753
Test Article	Pad Printing Ink: TPA/TPN/TPW/TPQ +Hardener TPWH 10:1 ratio Mixture of black and white 1:1	Ratio	120 cm <sup>2</sup> /20 mL
Lot/Batch #	Not Supplied by Spenser	Vehicle	USP 0.9% Sodium Chloride for Injection (NaCl), Customized OI (C- 1) in 20 Phased in NaCl (EPDS) and Polyethylene Glycol 400 (PEG)
Study	Class VI Test - USP	Extraction Conditions	70 ± 2 °C for 24 ± 2 hours

## KMI (Mirror / 镜面)

Achieves effects that resemble Hot Stamping & IMD/IML on complex product surfaces. Cut IMD labels and hot stamping foil costs. A maximum mirror effect can be achieved using clear foils of PMMA, polycarbonate, coated polyester and polystyrene.

针对达至热烫印及IMD/IML闪烁效果，大大节省IMD/IML模具制作冗长时间。印刷在聚甲基丙烯酸甲酯、聚碳酸酯、涂层聚酯及聚苯乙烯能获较大镜面效果。



## BRONZE & SILVER Colour / 金银色

Stylish your (plastic) product with metallic sense.

让你的(塑料)产品仿如涂装金属般亮丽。

# For various Bronze & Silver color, please see real colour shades card from KENT sales people.

# 有多种金银色，请向销售人员索取原色卡。



### Retarders / 慢干水

Retarders are slowly evaporating thinners used for slow printing speeds or printing of fine details (process printing). 慢干水能有效减低稀释剂的挥发来减慢油墨干固速度，适合应用于多色套色印刷工作。

- TPWD
- TPWD/EV
- K-VP



### Additives / 添加剂

• AP-77  
Use of adhesive agent will eliminate the necessity of pre-treatment by flaming or Corona. For PP / PE substrates. 使用黏化剂可免除预先火焰或火花处理的需要。用于PP / PE物料。

• AP-44 + • AP-45  
Combination of AP-44 & AP-45. Achieves very good abrasion resistances. 混合AP-44和AP-45添加剂会有良好的耐磨性。

• Matting Powder  
Used to mat the high gloss pad printing effect. 使高光泽的油墨变成哑光面。



# Certified Ink For Various Industries / 专业认证移印油墨

**Quality You Can Trust**  
核心优势

- ✓ German Imported Ink 德国进口, 品质保证
- ✓ 3 - 5 Year Shelf Life 3 - 5年超长保质期
- ✓ High Value 高性价比, 经济实用
- ✓ Durable & Versatile 性能稳定, 适用广泛

**无可替代**  
Proven Performance

- Compliant with various international safety standards and certifications
- Free of hazardous substances for safe and reliable use
- Excellent printability, high opacity, high fineness, and high adhesion
- Wide range of colors available
- Fast-drying
- Compatible with Green ink cups for low ink consumption
- Effectively improves the economic and environmental benefits of production

- 获各类安全法规认证
- 不含有害成份, 放心使用
- 提供优异的印刷适性/高遮盖性/高细腻/高附着力
- 丰富颜色可选
- 快干
- 配合环保油杯, 低油墨消耗
- 有效提升生产的经济和环保效益

## Auto Car Industry / 汽车配件行业



Free of / 不含:

- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAHs Cat.1 (多环芳香烃)
- Phthalates (邻苯二甲酸盐)



## Medical Industry / 医疗行业



"Requirements of biological test"  
"符合生物相容性报告"

Free of / 不含:

- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAHs Cat.1 (多环芳香烃)
- Phthalates (邻苯二甲酸盐)



## Faucet Industry / 水龙头配件行业



Free of / 不含:

- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAH (多环芳香烃)
- Phthalates (邻苯二甲酸盐)



# Certified Ink For Various Industries / 专业认证移印油墨

## Cosmetic Industry / 化妆品行业



Free of / 不含:

- BPA (双酚A)
- Cyclohexanone (环己酮)
- Solvent Naphtha (溶剂石脑油)
- GB Ester (羟基乙酸丁酯)
- Aromatics (芳烃)
- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAH (多环芳香烃)
- Phthalates (邻苯二甲酸盐)

## Outdoor Gear & Equipment Industry / 户外用品和配件行业



Free of / 不含:

- BPA (双酚A)
- Cyclohexanone (环己酮)
- Solvent Naphtha (溶剂石脑油)
- GB Ester (羟基乙酸丁酯)
- Aromatics (芳烃)
- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAH (多环芳香烃)
- Phthalates (邻苯二甲酸盐)

## Home Appliance Industry / 家电行业



Free of / 不含:

- BPA (双酚A)
- Cyclohexanone (环己酮)
- Solvent Naphtha (溶剂石脑油)
- GB Ester (羟基乙酸丁酯)
- Aromatics (芳烃)
- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAH (多环芳香烃)
- Phthalates (邻苯二甲酸盐)

## Gift & Premium Industry / 礼品行业



Free of / 不含:

- MOSH & MOAH (饱和烃矿物油和芳香烃矿物油)
- PAH (多环芳香烃)
- Phthalates (邻苯二甲酸盐)



