

U-Cure 9342

二官能团聚氨酯丙烯酸酯 / Polyurethane Acrylate

Difunctional Polyurethane Acrylate Resin

KAISTER

Innovation in Polymer Chemistry
昆山卡斯特高分子材料有限公司

技术资料表 Technical Data Sheet (TDS)

1 产品介绍 Product Introduction

U-Cure 9342 为二官能团聚氨酯丙烯酸酯树脂。该产品设计旨在提供卓越的平衡性能，特别是在极佳的附着力与优异的耐黄变性之间取得平衡，是高性能光固化涂料的核心组分。

U-Cure 9342 is a difunctional polyurethane acrylate resin. It is designed to provide excellent balanced performance, particularly achieving a harmony between superior adhesion and outstanding yellowing resistance, serving as a core component for high-performance UV-curable coatings.

2 物理及力学特性 Physical & Mechanical Properties

性能参数 Properties	典型指标 Typical Value	测试标准 Standard
外观 Appearance	透明澄清液体 / Clear Liquid	Visual
粘度 Viscosity (cps @ 60°C)	7,000 - 16,000	ASTM D2196
固含量 Solid Content (%)	100%	GB/T 1725
官能度 Functionality	2	Theoretical
NCO 残存 NCO Content (%)	< 0.2%	Titration
绍氏硬度 Shore Hardness	50D	ASTM D2240
拉伸强度 Tensile Strength	26 MPa	ASTM D638
断裂伸长率 Elongation	55%	ASTM D638

3 核心特性 Key Product Features

• 极佳的基材附着力 (Superior Substrate Adhesion)

分子链中含有高效极性基团，对 PC、ABS、PMMA 等多种工程塑胶以及真空电镀层表现出优异的润湿性和极强的化学键合力。

Optimized polar groups in the molecular chain provide excellent wetting and strong chemical bonding on various plastics like PC, ABS, PMMA, and vacuum plating layers.

• 优异的耐黄变与透明性 (Excellent Non-yellowing & Clarity)

选用高纯度脂肪族原料，有效防止光氧化降解，确保涂层长期处于高透明状态，不发黄。

Formulated with high-purity aliphatic raw materials to prevent photo-oxidative degradation, ensuring long-term transparency and color stability.

• 平衡的坚韧性与抗开裂 (Balanced Toughness & Crack Resistance)

兼具硬度与柔韧性，分子内能有效吸收机械应力，避免因交联密度不均导致的漆面崩裂或脆化。

Combines hardness with flexibility, effectively absorbing mechanical stress to prevent film cracking or embrittlement caused by uneven cross-linking density.

4 建议应用 Product Applications

- **真空电镀底漆 (Vacuum Metallization Basecoat)**

作为关键主体树脂，确保底材与金属层之间长效稳定的附着性能。

Used as a primary resin to ensure long-term adhesion stability between the substrate and the metal layer.

- **甲油胶 (Nail Polish Gel)**

用于底胶和彩胶，提供优异的韧性和耐候性，防止指尖崩甲。

Applied in base and color gels to provide toughness and weatherability, preventing nail chipping.

- **塑胶漆与PVC地板 (Plastic Coatings & PVC Flooring)**

提升表面的耐磨、耐醇及耐化学试剂擦拭能力。

Enhances surface resistance to abrasion, alcohol, and chemical reagents.

5 常见问题解答 Q&A

Q: U-Cure 9342 的稀释性表现如何？ (How is the dilutability of U-Cure 9342?)

A: U-Cure 9342 具有极佳的稀释性，与常用的单官能团及多官能团单体均有良好的相容性。其降粘效率高。

U-Cure 9342 shows excellent dilutability and compatibility with common mono- and multi-functional monomers.

6 储存与安全 Storage and Safety

- **储存 (Storage):** 密封避光存放于 -10°C 至 35°C 。保质期 12 个月。

Store in sealed, light-proof containers at -10°C to 35°C . Shelf life is 12 months.

- **安全 (Safety):** 对眼睛有刺激性。操作请佩戴个人防护装备，详见 SDS。

Irritating to eyes. Wear personal protective equipment. Refer to SDS for details.

联系方式 Contact Information

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