U-Cure 9537

二官能团聚氨酯丙烯酸酯 / Difunctional Polyurethane Acrylate

高韧性 *UV* 胶粘剂与防护涂料树脂 */ High Toughness Resin for UV Adhesives and Protective Coatings*

KASTER

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 9537 是一款高性能二官能团聚氨酯丙烯酸酯树脂。该产品展现出极佳的配方相溶性，易于调节，专门针对 *UV* 胶粘剂、防护涂料及柔性油墨等应用领域开发。其分子结构经优化设计，能为涂层提供优异的耐黄变性、耐候性及对多种基材的强劲粘接力，是高性能紫外线固化体系的理想选择。

U-Cure 9537 is a high-performance difunctional polyurethane acrylate resin. This product exhibits excellent formulation compatibility and is easily adjustable, specifically developed for UV adhesives, protective coatings, and flexible ink applications. Its optimized molecular structure provides superior non-yellowing, weather resistance, and strong adhesion to various substrates, making it an ideal choice for high-performance UV-curable systems.

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	透明液体 / Clear Liquid	Visual
粘度 Viscosity (cps @ 60°C)	3,000 – 6,000	ASTM D2196
固含量 Solid Content (%)	100	GB/T 1725
官能度 Functionality	2	Theoretical
NCO 残存 NCO Content (%)	< 0.2%	ASTM D2572
绍氏硬度 Shore Hardness	78A	ASTM D2240
拉伸强度 Tensile Strength (MPa)	7.6	ASTM D638
断裂伸长率 Elongation (%)	197	ASTM D638

3　核心特性 Key Product Features

- **极佳的相溶性 (Excellent Compatibility)**
  与多种 *UV* 树脂、单体及溶剂具有优异的相溶性，方便配方设计师在极宽的范围内进行粘度和性能调节，而不产生析出或浑浊。
  Excellent compatibility with a wide range of UV resins, monomers, and solvents, allowing formulators to adjust viscosity and properties across a broad range without precipitation or haziness.
- **优异的耐候性与耐黄变 (Superior Weathering Resistance)**
  专为长期户外应用设计，在紫外线照射下保持稳定的物理性能和光学透明度。
  Designed for long-term outdoor use, maintaining physical properties and clarity under UV exposure.
- **强大的附着力 (High Adhesion Strength)**
  对金属、塑胶等极性基材具有天然的亲和力，固化收缩率低，粘接持久。
  Natural affinity for polar substrates such as metals and plastics, with low shrinkage and long-lasting bonding.

4 建议应用 Product Applications

- **高性能胶粘剂 (High-performance Adhesives)**
  由于其优异的相溶性和伸长性能，适合制造高透明、功能性强的工业胶粘剂及功能性胶带。
  Ideal for manufacturing high-transparency and high-performance industrial adhesives and functional tapes due to its excellent compatibility and elongation properties.

- **柔性金属与塑料涂料 (Flexible Metal & Plastic Coatings)**
  作为主体树脂或改性添加剂，提升涂层在金属或电子产品外壳上的附着力及防护性能。
  Acts as a main resin or modifier to enhance adhesion and protective performance on metals or electronic housings.

- **丝印油墨 (Screen UV Inks)**
  提升墨膜在薄膜基材上的耐折叠性、柔韧性以及层间附着力。
  Enhances the fold resistance, flexibility, and inter-layer adhesion of ink films on thin film substrates.

5 常见问题解答 Q&A

Q: 该产品在不同温度下的相溶性如何？ (How is the compatibility at different temperatures?)

A: *U-Cure 9537* 经过严格测试，在常规储存温度范围内均能与常用单体（如 *IBOA, TMPTA* 等）保持透明均匀状态。
U-Cure 9537 has been strictly tested to maintain a clear and uniform state with common monomers (e.g., IBOA, TMPTA) within normal storage temperatures.

6 储存与安全 Storage and Safety

- **储存 (Storage)**: 应该存放于合适的密封容器中，并置于温度在 *-10°C* 至 *35°C* 的阴暗环境中。在此条件下，保质期至少为 *12* 个月。
  Store in appropriate sealed containers in a dark environment between -10°C and 35°C. Under these conditions, the shelf life is at least 12 months.

- **安全 (Safety)**: 该产品对眼睛有刺激性，对水生生物有毒。操作时请佩戴个人防护装备（*PPE*），详细信息请参阅 *SDS* 安全数据表。
  Irritating to eyes and toxic to aquatic life. Wear personal protective equipment (PPE) during handling. Refer to the SDS for detailed safety information.

联系方式 Contact Information

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