U-Cure 9335

高韧性快干型聚氨酯丙烯酸酯

High-Toughness Fast-Curing Urethane Acrylate

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 9335 是一款特殊设计的改性三官能聚氨酯丙烯酸酯。其分子结构中引入了高效缓冲链段，赋予了固化膜卓越的韧性和适度的回弹性。该树脂固化速度极快，展现出优异的物理力学平衡，能够提供卓越的吸能保护，有效缓解外力冲击带来的损伤。

U-Cure 9335 is a specially designed trifunctional modified urethane acrylate. Its molecular structure incorporates efficient buffering segments, endowing the cured film with superior toughness and moderate resilience. It features fast-curing capability and excellent mechanical balance, providing superior energy-absorbing protection.

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)	20,000 - 50,000	ASTM D2196
固含量 Solid Content (%)	100%	GB/T 1725
官能度 Functionality	3	Theoretical
NCO 残存 NCO Content (%)	< 0.2%	Titration
绍氏硬度 Shore Hardness	77A	ASTM D2240
拉伸强度 Tensile Strength	2.2 MPa	ASTM D638
断裂伸长率 Elongation	63%	ASTM D638

3　核心特性 Key Product Features

- **卓越韧性与类橡胶弹性 (Excellent Toughness & Rubber-like Elasticity)**
  固化膜具备极佳的柔韧性，在提供一定硬度的同时，拥有显著的伸长变形能力而不易脆裂。
  The cured film provides excellent flexibility and significant elongation capability without brittle failure.
- **优异的吸能与抗冲击性 (Impact Resistance & Energy Absorption)**
  分子链段具备良好的阻尼效应，能有效吸收外界冲击能量并迅速恢复原状。
  The molecular segments offer good damping effects, effectively absorbing external impact energy.
- **耐水解与化学稳定性 (Hydrolysis Resistance & Chemical Stability)**
  在潮湿或高温环境下依然能保持物理性能的稳定，表现出优异的耐候性。
  Maintains stable physical properties under humid or high-temperature conditions.

4 建议应用 Product Applications

- **电子产品防护涂装 (Electronics Protection)**
  为手机、平板电脑、穿戴设备等提供优异的表面韧性及防摔缓冲保护。
  Provides surface toughness and drop-cushioning protection for mobile devices and wearables.
- **工业临时保护涂层 (Industrial Protection)**
  适用于高精度工件在加工或运输过程中的表面防护，且易于剥离。
  Suitable for surface protection of high-precision workpieces, with easy peelability.
- **减震结构胶粘剂 (Shock-absorbing Adhesives)**
  用于精密光学元件或电子模组的粘接，吸收微振动。
  Used for bonding precision components to absorb micro-vibrations.

5 常见问题解答 Q&A

Q: 这种树脂的韧性来源是什么？ (What is the source of this resin's toughness?)

A: 韧性来源于分子设计中引入的高分子量脂肪族聚氨酯链段，这些链段能通过分子链的伸展吸收能量。
The toughness comes from high-molecular-weight aliphatic urethane segments which absorb energy through segment extension.

6 储存与安全 Storage and Safety

- **储存 (Storage)**: 密封避光存放于 *-10°C* 至 *35°C* 干燥处。保质期 *12* 个月。
  Store in sealed, light-proof containers at -10°C to 35°C. Shelf life: 12 months.
- **安全 (Safety)**: 本品对眼部有刺激性。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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