U-Cure 9308

聚氨酯丙烯酸酯 / Polyurethane Acrylate

二官能聚氨酯丙烯酸酯树脂 / *Difunctional Polyurethane Acrylate Resin*

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 9308*为一款高性能二官能团聚氨酯丙烯酸酯树脂。该产品专为辐射光固化涂料配方体系开发，旨在提供优异的平衡性能，特别是在需要良好柔韧性、卓越流平效果以及复杂底材附着力的应用场景中表现突出。

U-Cure 9308 is a high-performance difunctional polyurethane acrylate resin designed for radiation-curable coating formulations. It provides a balanced performance profile, particularly in applications requiring superior flexibility, excellent leveling, and strong adhesion.

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 @ 25°C)	6,500 - 7,500	ASTM D2196
固含量 Solid Content (%)	100%	GB/T 1725
官能度 Functionality	2	Theoretical
NCO 残存 Content (%)	＜ 0.2	Titration
绍氏硬度 Shore Hardness	90A	ASTM D2240
拉伸强度 Tensile Strength	12 MPa	ASTM D638
断裂伸长率 Elongation	52%	ASTM D638

3　核心特性 Key Product Features

- **低粘度与高流平性 (Low Viscosity & High Leveling)**
  优化的分子量分布赋予其出色的流动性，确保涂层在施工后迅速流平。
  Optimized molecular weight distribution provides excellent flowability and rapid leveling.
- **柔韧性佳 (Excellent Flexibility)**
  二官能结构赋予漆膜优异的延伸率和抗冲击性，降低固化收缩应力。
  The difunctional structure provides excellent elongation and reduces curing shrinkage stress.
- **上镀性优异 (Superior Metallization Suitability)**
  对各种真空电镀材（如金属、铝等）具有极佳的亲和力，是电镀底漆的理想选择。
  Exhibits excellent affinity for vacuum metallization materials, ideal for UV primers.

4 建议应用 Product Applications

- **真空电镀底漆 (Vacuum Metallization Primer)**
  利用其高流平特性，为电镀层提供平整的底面，并确保金属沉积层牢固结合。
  Provides a smooth base and ensures strong bonding for vacuum metallization layers.
- **塑胶罩光漆 (Plastic Topcoats)**
  适用于手机、家电等塑料外壳的高光*UV*喷涂，提供极佳的表面装饰效果。
  Suitable for high-gloss UV spraying on consumer electronics for superior decoration.
- **通用 UV 涂料 (General Purpose UV Coatings)**
  作为主体树脂，改善配方的施工性，同时提升漆膜韧性。
  Used as a base resin to improve application properties and enhance film toughness.

5 常见问题解答 Q&A

Q: U-Cure 9308的流平性如何帮助提升表面质量? (How does the leveling improve surface quality?)

A: 其低粘度特性使其能迅速润湿底材并消除刷痕，显著减少表面缺陷并提升光泽度。
Its low viscosity allows rapid wetting and elimination of brush marks, enhancing gloss.

6 储存与安全 Storage and Safety

- **储存 (Storage)***:* 密封存放于阴暗环境（$-10°C$ 至 $35°C$），保质期至少 *12* 个月。
  Store in sealed containers in a dark environment ($-10°C$ to $35°C$). Shelf life $\geq$ 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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