

U-Cure 9312

二官能团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 9312 是一种高性能的二官能团聚氨酯丙烯酸酯树脂。该产品旨在为各种工业涂料提供平衡的性能，特别是在需要快速固化、优异流平性以及追求高坚韧度的应用场合表现突出。

U-Cure 9312 is a high-performance difunctional polyurethane acrylate resin designed to provide balanced properties for industrial coatings, especially in applications requiring fast curing, excellent leveling, and high toughness.

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	澄清透明液体 / Clear Liquid	Visual
粘度 Viscosity (cps @ 60°C)	15,000 - 25,000	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
邵氏硬度 Shore Hardness	94A	ASTM D2240
拉伸强度 Tensile Strength	11 MPa	ASTM D638
断裂伸长率 Elongation	61%	ASTM D638

3 核心特性 Key Product Features

• 坚韧性好 (Excellent Toughness)

该树脂固化后形成的涂膜具有极佳的柔韧性与强度平衡，抗冲击能力强，不易脆裂。

The cured film exhibits an excellent balance of flexibility and strength, with high impact resistance and resistance to brittleness.

• 低能量固化 (Low Energy Curing)

该树脂具有极高的感光活性，可在较低的辐射能量下实现快速干爽。

The resin possesses high photosensitivity, enabling rapid surface drying even under low radiation energy.

• 抗油性与遮盖力 (Oil Resistance & Hiding Power)

具备良好的抗油性能和优异的表面遮盖能力，确保涂膜表面的均匀性。

Good oil resistance and excellent surface hiding capability, ensuring the uniformity of the coating surface.

• 优异的流平性 (Excellent Leveling)

在各种基材上均能表现出极佳的润湿流平效果，赋予涂膜优异的表面观感。

Shows excellent wetting and leveling effects on various substrates, giving the coating film superior surface aesthetics.

4 建议应用 Product Applications

- **真空电镀底漆 (Vacuum Plating Primer)**

作为底漆组分，提升整体系统的涂覆质量与柔韧性。

Used as a primer component to enhance overall system coating quality and flexibility.

- **UV 罩光漆 (UV Overprint Varnish)**

增加表面光泽度并提供出色的保护性能。

Increases surface gloss and provides excellent protective properties.

- **木器涂料 (Wood Coatings)**

提升木材表面的涂装质量与流平效果。

Improves the coating quality and leveling effect on wood surfaces.

5 常见问题解答 Q&A

Q: 树脂粘度较高，使用时如何稀释处理？ (The resin has high viscosity, how to dilute it for use?)

A: U-Cure 9312 粘度较高，使用时可以经 50-80°C 烘烤加热后，使用活性单体或有机溶剂稀释后使用，以达到理想的施工粘度。

Due to its high viscosity, U-Cure 9312 can be heated at 50-80°C and then diluted with reactive monomers or organic solvents to achieve the desired application viscosity.

6 储存与安全 Storage and Safety

- **储存 (Storage):** 应存放于密封容器中，置于 -10°C 至 35°C 的阴暗通风环境中。在此条件下，保质期至少为 12 个月。

Store in sealed containers in a dark, ventilated environment at -10°C to 35°C. Shelf life is at least 12 months.

- **安全 (Safety):** 本品对眼睛有刺激性，对水生生物有毒。使用前请仔细阅读安全数据表 (SDS)。

Irritating to eyes and toxic to aquatic life. Please read the Safety Data Sheet (SDS) carefully before use.

联系方式 Contact Information

昆山卡斯特高分子材料有限公司 Kunshan Kaster Polymer Co., Ltd.

地址：江苏省昆山市玉山镇祖冲之路 1666 号清华科技园

Tel: 0512-50137234 Web: www.kasterchem.com