

718 Park East Drive, Woonsocket, RI 02895 USA

Phone: +1 (401)-726-4500

Email: info@epoxyset.com www.epoxyset.com

FLASHBOND™

UV-5403S

UV CURE EPOXY

TECHNICAL DATA NOVEMBER 2021

Product Description

UV-5403S is a filled, low shrinkage, light curing epoxy adhesive that offers low CTE and high bonds strength. UV-5403S cures to a high bond strength polymer with excellent adhesive to metals, ceramics, and glass. This epoxy was specifically designed as a glob top encapsulant for smart card applications and encapsulations of chip modules. UV-5403S is free of solvents, has high ionic purity, and is resistant to moisture and humidity. This epoxy cures quickly under LED and UVA light.

APPLICATIONS

FEATURES

SUBSTRATES

PACKAGING

Syringes

Bulk

- Glop Top
- Dam & Fill
- General Encapsulant
- RoHS & REACH Compliant
- Halogen Free (IEC 61249-2-21)
- · High Bond Strength
- Fast UV/LED Cure

- Metals Ceramics
- Glass

TYPICAL PROPERTIES OF UNCURED MATERIAL		
Property	Value	
Chemical Class	Cationic Epoxy	
Appearance	Off White	
Viscosity, 25°C, cPs	5,000 to 8,000	
Density, g/mL	1.37	

TYPICAL PROPERTIES OF CURED MATERIAL	
Property	Value
Glass Transition Temperature (Tg), °C	72
Hardness, Shore	D-78
Ultimate Tensile Strength, PSI	5,000
Elongation at Break, %	1-3
Operating Temperature Range, °C	-55 to 150
Volume Resistivity, Ω-cm	1 x 10 ¹⁴

^{*}All properties given are typical values and are not intended for use in preparing specifications.

CURE OVERVIEW		
Optimal Wavelength	LED 365nm, UVA	
Optimal Intensity	100-300 mW/cm2	

^{*}Cure time is dependent on light intensity. Test speciments were cured for 30 seconds at 150 mW/cm2 under a 365nm LED light.

SHIPPING, SHELF LIFE, STORAGE

STORE AT 2-10°C, SHELF LIFE: 6 MONTHS

MATERIAL IS LIGHT & HEAT SENSITIVE. CONSULT SDS FOR SAFE HANDLING RECOMMENDATIONS.

THIS MATERIAL IS SOLD FOR INDUSTRIAL USE ONLY

EPOXYSET MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WITH RESPECT TO THIS PRODUCT AND GUARANTEES NO PARTICULAR OUTCOME OR RESULT FROM ITS USE. EPOXYSET'S LIABILITY TO CUSTOMER WITH RESPECT TO THIS PRODUCT SHALL IN NO EVENT EXCEED THE AMOUNT PAID BY CUSTOMER FOR IT.