

HANAREY CSA5933 Product Data Sheet

Jan 2026

Hanarey CSA5933 is a medical-grade, medium viscosity UV-curable adhesive that has passed the ISO 10993 biocompatibility tests. It is designed for bonding materials such as PC, PVC and stainless steel, where large gap-filling capacity and high transparency are required. The product exhibits excellent bonding performance on a wide range of substrates including glass, plastics and metals. The material cures extremely fast upon exposure to 365nm LED light. Its ability to cure in seconds enables faster processing, greater output, and lower processing costs.

UNCURED PROPERTIES *

Property	Value	Test Method
Chemical Class	Acrylated Urethane	N/A
Appearance	Translucent Pale Yellow Liquid	N/A
Viscosity, cP	150~550	HSTM 751‡
Density, g/ml	1.02	ASTM D1875
Shelf Life from Date of Manufacture	180 Days	N/A

CURED MECHANICAL PROPERTIES *

Property	Value	Test Method
Hardness	D70~D90	ASTM D2240
CTE α 1, $\mu\text{m/m/}^{\circ}\text{C}$	91	ASTM E831
CTE α 2, $\mu\text{m/m/}^{\circ}\text{C}$	316	ASTM E831
Glass Transition Tg, $^{\circ}\text{C}$	68	ASTM D5418
Tensile at Break, MPa	40	ASTM D638
Elongation at Break, %	8.1	ASTM D638

CURED MECHANICAL PROPERTIES *

Property	Value	Test Method
Modulus of Elasticity, MPa	1,777	ASTM D638
Boiling Water Absorption, % (2 h)	2.8	ASTM D570
Water Absorption, % (25 $^{\circ}\text{C}$, 24 h)	3.1	ASTM D570
Linear Shrinkage, %	0.18	ASTM D2566

ADHESION *

Substrate	Shear Strength [#] , MPa
PC / PC	25.5
PC / PVC	26.8
PC / ABS	15.9
PC / PMMA	16.3

^{*} Not
 Specifications
 N/A Not Applicable
[#] Cured by Dymax 5000-EC (all spectrum), 120 mW/cm²intensity, 30 s
[‡] HSTM refers to Hanarey Standard Test Method

TRANSPORTATION, STORAGE, AND SHELF LIFE

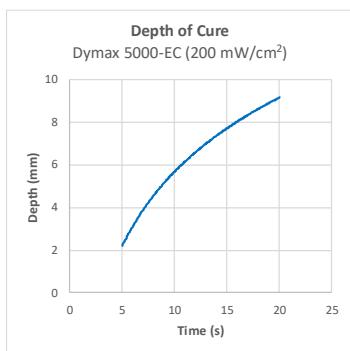
Do not crush and throw to avoid leakage during transportation. It is verified that the product's exposure to ambient temperature for a short time during transportation will not affect its performance. Store the material in a low-humidity, cool, and dark place when not in use. This product may polymerize upon prolonged exposure to ambient and artificial light as well as moisture. This material shelf life is noted on page 1 of this document when stored between 10 $^{\circ}\text{C}$ (50 $^{\circ}\text{F}$) and 35 $^{\circ}\text{C}$ (95 $^{\circ}\text{F}$) in the original, unopened container.

CLEAN UP

Uncured Hanarey materials may be removed from dispensing components and parts with organic solvents. Cured material will be impervious to many solvents and difficult to remove. Cleanup of cured material may require mechanical methods such as ultrasonic bath, water, jet, vacuum tweezers, air knife, and/or warming to aid in the removal.

CURING GUIDELINES

The graph below shows the increase in depth of cure as a function of exposure time at Dymax 5000-EC 200 mW/cm². These depths are only due to light cure.



Full cure is best determined empirically by curing at different times and intensities and measuring the corresponding change in cured properties such as tackiness, adhesion, hardness, etc. Full cure is defined as the point at which more energy exposure no longer improves cured properties. Higher intensities or longer cures (up to 5x) generally will not degrade Hanarey light-curable adhesives.

Hanarey recommends that customers employ a safety factor by curing longer and/or at higher intensities than required for a full cure. Although Hanarey Application Engineering can provide technical support and assist with process development, each customer ultimately must determine and qualify the appropriate curing parameters required for their unique application.

GENERAL INFORMATION

This product is intended for industrial use only. Keep out of the reach of children. Avoid breathing vapors. Avoid contact with skin, eyes, and clothing. Wear impervious gloves. Repeated or continuous skin contact with uncured material may cause irritation. Remove material from the skin with soap and water. Never use organic solvents to remove material from the skin and eyes. For more information on the safe handling of this material, please refer to the Safety Data Sheet before use.

The data provided in this document are based on historical testing that Hanarey performed under laboratory conditions as they existed at that time and are for informational purposes only. The data are neither specifications nor guarantees of future performance in a particular application. Hanarey does not guarantee that this product's properties are suitable for the user's intended purpose. The contents of this document are subject to change. Unless specifically agreed to in writing, Hanarey shall have no obligation to notify the user about any change to its content.

Data Collected: Jan 2026

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