

Advanced Materials**TDR 1100-11 Adhesive**

ARCHERY BOW ADHESIVE
THIXOTROPIC EPOXY ADHESIVE



chemical-concepts.com
800.220.1966

410 Pike Road • Huntingdon Valley, PA 19006

DESCRIPTION :

TDR 1100-11 epoxy adhesive is a thixotropic system formulated for bonding glass laminate, wood and plastic components used in the construction of archery bows. Its convenient 2:1 by volume mixing ratio facilitates use of TDR 1100-11 epoxy adhesive with automated metering equipment. TDR 1100-11 epoxy adhesive has a long (> 90 minutes) pot life, cures quickly at temperatures above 170 °F (77 °C) and produces a clear bond line.

TYPICAL PROPERTIES :

Property	Test Method	Test Values ⁽¹⁾	
		Resin	Hardener
Color/Form	Visual	Creamy liquid	Amber liquid
Specific Gravity	ASTM D-792	1.16	0.99
Viscosity, cP @ 77 °F (25 °C)	ASTM D-2393	16,500	38,000

TYPICAL MIXED PROPERTIES :

Property	Test Method	Test Values ⁽¹⁾
Resin/Hardener Ratio (by weight)	ASTM D-2471	100/42
Resin/Hardener Ratio (by volume)		100/50
Pot Life, minutes @ 77 °F (25 °C) (4 fl oz mass)	ASTM D-2471	95
Mixed Viscosity, cP @ 77 °F (25 °C)	ASTM D-2393	13,000

TYPICAL CURED PROPERTIES :

@ 77 °F (25 °C)

Cure

Heat deflection temperature, °F (°C)

15 min. @ 180 °F (82 °C)

164 (73)

15 min. @ 215 °F (102 °C)

192 (89)

Tensile Properties

Ultimate strength, psi (Mpa)

9100 (62.7)

8900 (61.3)

0.2 % offset, psi (Mpa)

5800 (40)

6000 (41.3)

Elongation at break, %

3.6

4.6

Modulus of Elasticity, psi (Mpa)

396,000 (2,731)

342,000 (2,359)

Lap shear strength, psi (Mpa)

3520 (24.3)

4100 (28.3)

@ 77 °F (25 °C)

3000 (20.7)

>3300 (22.7)

@ 160 °F (71 °C)

1900 (13.1)

3200 (22)

@ 190 °F (88 °C)

* **2024T3 alclad aluminum etched per ASTM D-2651**

CAUTION :

Huntsman Advanced Material Americas Inc. maintains up-to-date Material Safety Data Sheet (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material. Copies of the latest MSDS may be requested by calling our customer service group at 888-564-9318 or emailing your request to advanced_materials@huntsman.com

To protect against any potential health risks presented by our products, the use of proper personal protective equipment (PPE) is recommended. Eye and skin protection is normally advised. Respiratory protection may be needed if mechanical ventilation is not available or is insufficient to remove vapors.

For detailed PPE recommendations and exposure control options consult the product MSDS or a Huntsman EHS representative.

FIRST AID :

Eyes and skin : Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

Inhalation : Remove subject to fresh air.

Swallowing : Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

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Main Offices :

Huntsman Corporation

10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

Huntsman Advanced Technology

Center

8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400

Website :

www.huntsman.com/advanced_materials



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