

Advanced Materials**Araldite[®] AW 8621 Resin
HW 8621-4 Hardener Adhesive**

HIGH-STRENGTH BLACK POLYURETHANE ADHESIVE

DESCRIPTION :

Araldite[®] AW 8621 Resin / HW 8621-4 Hardener polyurethane adhesive is a two-part, black system specifically formulated for bonding plastics including polycarbonate, ABS, nylon and Telene¹ as well as painted metals. It features excellent environmental and impact resistance.

APPLICATIONS :

- Telene
- ABS, polycarbonate and other plastics
- SMC and FRP
- Primed metals

ADVANTAGES :

- Tough and resilient
- Fast setting
- Bonds a wide variety of materials

MIX RATIO :

By Weight	70 to 100	Resin to Hardener
By Volume	85 to 100	Resin to Hardener

¹ Telene is a registered trademark of Cymetech. LLC

TYPICAL PHYSICAL PROPERTIES :

Tested @ 77 °F (25 °C)

Property	Criteria	ASTM Test Method	Test Values
Appearance	Resin Hardener	Visual	Amber liquid Black liquid
Specific Gravity	Resin Hardener	D-792	1.12 1.35
Viscosity (cP) @ 77 °F (25 °C)	Resin Hardener	D-2393	1,500 25,000-30,000
Gel Time, minutes @ 77 °F (25 °C)	70 gram mass	D-2471	5.0-6.5

CURE SCHEDULE :

Temperature	Handling Strength⁽¹⁾	Minimum Cure Time
77 °F (25 °C)	1 hour	12 hours
110 °F (43 °C)	30 minutes	8 hours
140 °F (60 °C)	15 minutes	1 hour

⁽¹⁾ Time to reach 200 psi lap shear strength**TYPICAL CURED PROPERTIES :**Tested @ 77 °F (25 °C) unless otherwise noted ⁽¹⁾

Not for specification purposes

Property	Test Method	Test Values
Shore Hardness	ASTM D-2240	40D (85A)
Ultimate Tensile Strength, psi (Mpa)	ASTM D-638	2100 (14.5)
Elongation, %	ASTM D-638	250
Tg per DMA, °F (°C)	ASTM D-4065	122 (50)
Coefficient of Thermal Expansion, in/in/°C	ASTM D-831	7.5 x 10 ⁻⁵
Lap Shear Strength, psi (Mpa)		
<i>Effect of Substrate</i>	ASTM D-1002	
Aluminum ⁽²⁾		2900 (20)
Telene ⁽³⁾	SAE J1525	980 (6.8)
SMC	SAE J1525	520 (3.6)
Lap Shear Strength, psi (Mpa)	SAE J1525	
<u>Effect of test Temperature</u>		
(Tested on SMC)		
-40 °F (-40 °C)		550 (3.8)
74 °F (23 °C)		525 (3.6)
180 °F (82 °C)		65 (0.4)

⁽²⁾ Etched per ASTM D2651, Cured 12 hours at 77 °F (25 °C) followed by 30 minutes at 275 °F (135 °C)⁽³⁾ Abraded and solvent wiped**CAUTION :**

Huntsman Advances Materials 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 800-367-8793 or emailing your request to adhesives_group@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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