



**HUNTSMAN**

Enriching lives through innovation

## Advanced Materials

# ARALDITE<sup>®</sup> AY 8683 Resin Hardener HY 8683

## POLYUREA ELASTOMERIC ADHESIVE

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### Description

ARALDITE<sup>®</sup> AY 8683 Resin/Hardener HY 8683 hardener polyurea elastomeric adhesive is a two-component system formulated for filter-bonding applications. The polyurea elastomer has a quick set time and can be conveniently mixed by hand or via meter-mix equipment. It cures at room temperature.

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### Applications

Filter bonding

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### Advantages

Tough and resilient  
Easily dispensable  
Fast setting

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Typical Properties	Property	Test Method	Test Values <sup>(1)</sup>	
			Resin	Hardener
	Color/appearance	Visual	Milky White	Blue Liquid
	Specific Gravity	ASTM D-792	1.03	1.03
	Viscosity, cP @ 77°F (25°C)	ASTM D-2393	8,000 – 12,000	60 - 90

Typical Mixed Properties	Property	Test Method	Test Values <sup>(1)</sup>	
			Resin	Hardener
	Reaction Ratio (by weight)		100R/60H	
	Reaction Ratio (by volume)		100R/60H	
	Pot Life, minutes @ 77°F (25°C), 90 gram mass	ASTM D-2471	15	
	Mixed viscosity, cP @ 77°F (25°C)	ASTM D-2393	2,500 – 3,000	

<sup>1</sup>Tested @ 77°F (25°C)

Recommended Cure Schedule	Temperature	Minimum Cure Time
	77°F (25°C)	24 hours

**Typical Cured Properties** (Not for specification purposes)  
Cured for 7 days @ 77°F (25°C)

	Test Method	Test Values <sup>(1)</sup>
Hardness, Shore A	ASTM D-2240	95 ± 5
Tensile Strength*, psi.(MPa)	ASTM D-638	3,500 (24.1)
Ultimate Elongation*, %	ASTM D-638	475
Tear Strength*, ppi` (N/mm)	ASTM D-624	375 (65.6)
Floating Roller Peel, pli (N/mm)	ASTM D3167-03a	100 (17.5)

\* @ 20 in. (50 cm) per min.

Tested @ 77°F(25°C) unless otherwise noted<sup>(1)</sup>

**NOTE**

The test data and results set forth herein are based on laboratory work and/or field testing and does not necessarily indicate results that the buyer or user will attain. Full-scale testing and product performance are the responsibility of the buyer and user.

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## Storage

ARALDITE® AY 8683 Resin/Hardener HY 8683 hardener polyurea elastomeric adhesive components should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+36°F and 104°F). Under these storage conditions, the shelf life is 2 years. The product should not be exposed to direct sunlight.

Keep containers closed to prevent moisture absorption and contamination. These products are moisture sensitive and packaged under a blanket of dry nitrogen. If a container is opened, re-blanket with dry nitrogen and then tightly reseal.

If stored below 60°F, the adhesive should be brought to 60°F – 77°F and conditioned at this temperature for some time prior to use.

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## Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Material Safety Data Sheets (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.

### First Aid!

Refer to MSDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN**

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