

Araldite[®] CW 8766

Aradur[™] HY 8766

High Voltage Epoxy Encapsulation System

General

Araldite[®] CW 8766 with Aradur[™] HY 8766 is a two-part epoxy system used for potting and encapsulating high voltage TV components. It is a low-viscosity, UL 94 V-O approved system without the use of halogens, phosphorus or antimony trioxide. With a convenient mix ratio, long open time, and excellent flexibility this system provides superior performance for coil winding impregnation.

Applications

Fly-back transformers
Diode splits

Benefits

UL 94 V-0 complaint
Excellent dielectric properties
Good thermal shock resistance
Excellent pressure cooker performance
Outstanding high temperature endurance
Environmentally friendly

Typical Properties*	Araldite® CW 8766	
	Viscosity @ 25°C, cPs	20,000 – 80,000
	Specific gravity, g/cm ³	1.70 – 1.74
	As supplied form	Liquid
	Color	Off-white
	Aradur™ HY 8766	
	Viscosity @ 25°C, cPs	25 – 65
	Specific gravity, g/cm ³	1.18 – 1.22
	As supplied form	Liquid
	Color	Light yellow to red
	Mixed	
	Gel time at 100°C, min	25 – 35
	T _g , °C	>= 100

* Typical properties are based on Huntsman's test methods. Copies are available upon request.

Packaging & Storage The products described in this instruction sheet should be stored in a dry place and, whenever possible, in the tightly closed original containers. Under these conditions their shelf lives will be one year from date of shipping. Contact Customer Service for packaging information.

System Preparation Prefilled components should be stirred and homogenized in the original containers prior to use.

Highly-filled components are heated to 60° to 80°C in the original container (e.g. overnight in an oven) to facilitate stirring and removal.

To prepare the casting mix, the resin component should be homogenized in holding tank A at 80° to 90°C under a vacuum of 1 to 5 mbar, the hardener component in holding tank B at 30° to 40°C and a vacuum of 1 to 5 mbar. A meter should be used to feed the resin and hardener components to an impeller mixer.

Mix ratios

	Parts by weight	Parts by volume
Araldite® CW 8766	100	100
Aradur™ HY 8766	35	53

Processing data

(average values)

Initial viscosity @ 25°C, cPs	2,500
Work life @ 25°C, hours	> 16
Gel time @ 100°C, min	30
Recommended cure time, hours	
@ 80°C	2
+ @ 110°C	3

**Physical Properties
(typical values)**

Density, g/cm ³	1.60
Hardness, Shore D	85
Tensile strength at break, psi	5,800
Tg, °C	110
Water absorption by weight, %	< 0.1
Flexural strength, psi	11,600
Flame test	Certified @ 4 mm

**Electrical Properties
(typical values)**

Dielectric strength, KV/mm	21
Dielectric constant	4.0
Dissipation factor	0.011
Arc resistance, sec	≥ 120
Comparative tracking index, volt	≥ 500

**Pressure Cooker test
(typical values)**

	Initial	50 hrs	100 hrs
Dielectric strength, KV/mm	21.0	15.2	12.4
Water pickup, %	--	--	1.70

**Handling/Safety
Precautions**

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

Araldite® CW 8766

Warning! May cause eye irritation. Causes skin irritation and possible allergic skin reaction. Harmful if inhaled or ingested. Medical conditions aggravated by exposure: allergies, eczema, eye and respiratory diseases.

Aradur™ HY 8766

Warning! Vapor irritating to eyes and mucous membranes. Contact causes skin irritation and possible allergic skin reaction. Harmful if inhaled or ingested. Medical conditions aggravated by exposure: allergies, eczema, eye and respiratory diseases.

First Aid**In case of contact:**

Eyes: Flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Skin: Wash skin thoroughly with mild soap and water; remove contaminated clothing before reuse. Discard contaminated shoes and other articles made of leather.

Inhalation: Remove person to fresh air.

Ingestion: Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

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Note

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