

## Araldite<sup>®</sup> CY 8763 Resin / Aradur<sup>®</sup> HY 8763 Hardener

### ACID RESISTANT EPOXY ENCAPSULATING SYSTEM

#### Product Description

Araldite<sup>®</sup> CY 8763 Resin / Aradur<sup>®</sup> HY 8763 Hardener system is a high-performance, two-component epoxy system designed for use in sealed lead acid storage batteries. This material has a high resistance to sulfuric acid and provides excellent adhesion properties.

#### Applications

Potting, sealing and encapsulation applications requiring sulfuric acid resistance, e.g. terminal potting of lead acid batteries.

#### Features

Bonds well to ABS and other thermoplastic housing materials  
Excellent sulfuric acid resistance  
Low viscosity  
Convenient 2 to 1 mix ratio by volume

#### Typical Properties

Property	Araldite <sup>®</sup> CY 8763 Resin	Aradur <sup>®</sup> HY 8763 Hardener	Test Method
Appearance	Red liquid	Amber liquid	Visual
Density, g/cm <sup>3</sup>	1.13 - 1.17	1.03 - 1.07	ASTM D-792
Viscosity at 25°C, cP	2,000 - 5,000	2,000 - 5,000	ASTM D-2393

## Processing

### Mix ratio

Product	Parts by weight	Parts by Volume
Araldite® CY 8763 Resin	100	100
Aradur® HY 8763 Hardener	46	50

### Processing Data

Product	Property
Initial Mixed Viscosity at 25 °C (77 °F), cP	~ 3,500
Pot life, 300 g at 25 °C(77 °F), min.	~20
Gel Time at 60 °C, min	8 - 16
Recommended Cure Time at 60 °C, min.	60

### System Preparation

Mix the two component with a meter-mix dispensing equipment or manually as follows:

Weigh the desired amount of resin into a mixing container, add the corresponding amount of hardener to the resin. Mix thoroughly by means of mechanical mixer or manually. Be sure to scrape the sides and walls of the mixing container during mixing. Check for uniform color as a sign of complete mixing. A minimum of one minute mixing time is being suggested - three to five minutes mixing time is optimal.

For potting or encapsulating applications, dispense or pour directly into the area to be filled. To minimize air bubbles, de-gas under vacuum prior to potting and pour the material into the area to be filled (preferably at the lowest point). Do not move the stream of liquid back and forth as this may entrap air. Allow the material to slowly flow around and through the subcomponents to be encapsulated. Keep the stream of material thin and continuous to assist in breaking any bubbles which may be present and to prevent the introduction of additional air.

### Typical Cured Properties

Property	Test Method	Value
Tg, °C	DSC	60 - 80
Lap shear strength at break, psi	ASTM D-1002	>1,200
Peak Exotherm Temperature, °C	DSC	176
Average weight gain, wt. %		1.02

(sample soaked in sulfuric acid for 24 hours at 60 °C)		
Hardness, Shore D	ASTM D-2240	80 - 90
Thermal Conductivity, W/m-K	ASTM E-1225	0.263
Arc resistance, seconds	ASTM D-495	67
Track Resistance, minutes Initial tracking voltage, 3.5 kV Time to track @ 2.50, kV	IEC 60587	1.3 10.8
Dielectric Strength, Volt/mil. ( 1/8" plaque/23°C, 50 Hz)	IEC 60243-1	700
Dielectric Constant	IEC 60250	Figure 1 below
Dissipation Factor	IEC 60250	Figure 2 below
Volume Resistivity, Ωcm	IEC 60093	Figure 3 below

Unless otherwise stated, the data were determined with typical production batches using standard test methods. They are typical values only, and do not constitute a product specification.

Figure 1 - Dielectric Constant

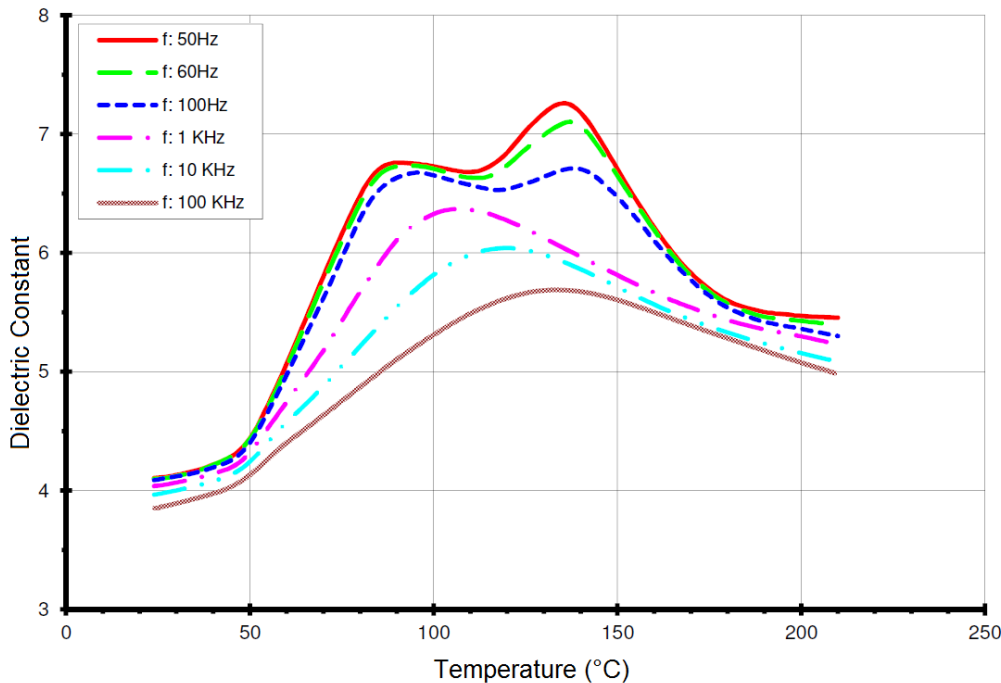


Figure 2 - Dissipation Factor

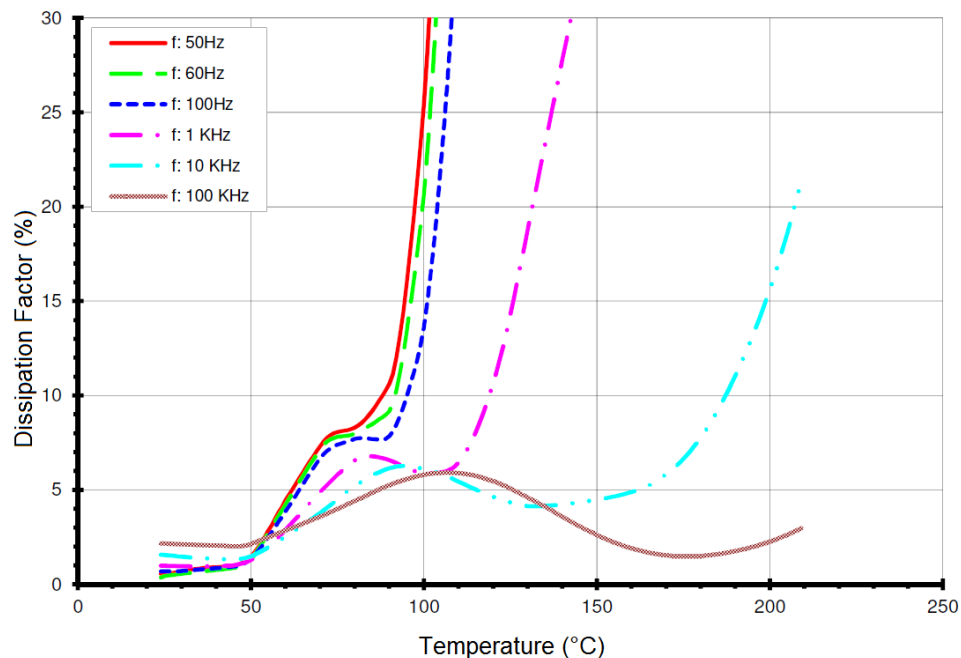
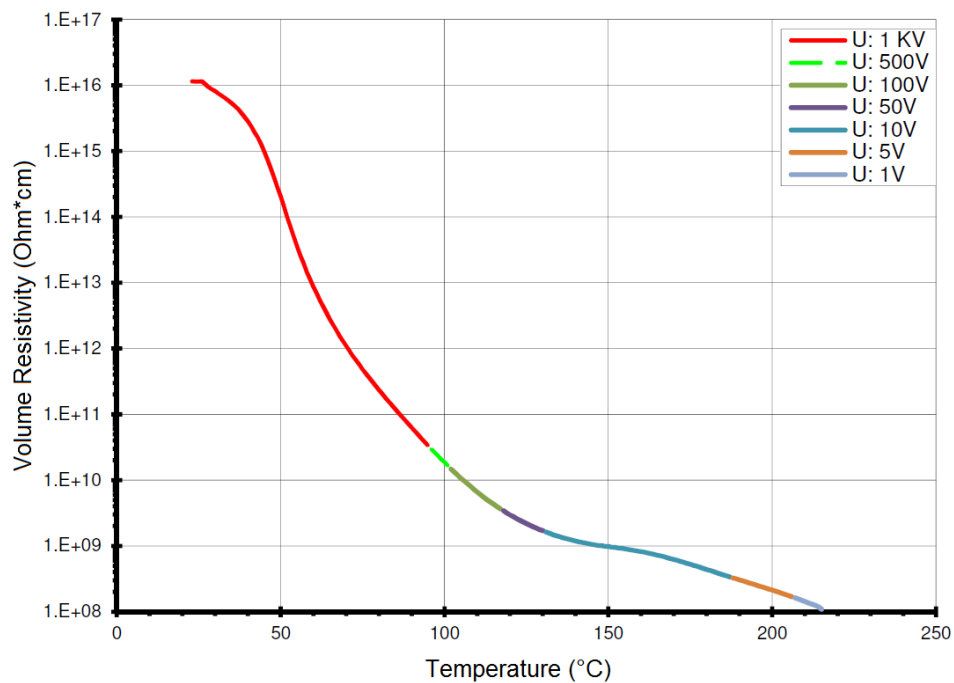


Figure 3 - Volume Resistivity



### Storage

When stored in a dry place in their original sealed container at a temperature between 2 °C and 40 °C (36 °F to 104 °F), Araldite® CY 8763 Resin and Aradur® HY 8763 Hardener have a 12 months shelf life from date of manufacture. These products should not be exposed to direct sunlight.

### Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) 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 SDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN**

**FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

## Important Legal Notice

Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. ("Huntsman"). The following supercedes Buyer's documents.

Huntsman warrants that at the time and place of delivery all Products sold to Buyer shall conform to the specifications provided to Buyer by Huntsman.

While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN (EXCEPT AS SET FORTH ABOVE REGARDING CONFORMANCE WITH SPECIFICATIONS PROVIDED TO BUYER BY HUNTSMAN) IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES.

No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights.

The Product may be or become hazardous. The Buyer should obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, together with proper shipping, handling and storage procedures for the Product, and should comply with all applicable governmental laws, regulations and standards relating to the handling, use, storage, distribution and disposal of, and exposure to the Product. Buyer shall also take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product, and the containers or equipment in which the Product may be handled, shipped or stored.

**Araldite and Aradur** are registered trademarks of Huntsman LLC or an affiliate thereof in one or more, but not all countries.

© 2015 Huntsman Advanced Materials Inc.

### Main Offices:

**Huntsman Corporation**  
10003 Woodloch Forest Dr  
The Woodlands, TX 77380  
888-564-9318

**Huntsman Advanced Technology Center**  
8600 Gosling Rd.  
The Woodlands, TX 77381  
281-719-7400