HUNTSMAN

Electrical Insulation Materials

ARALDITE Casting Resin System

ARALDITE[®] DW 0131 White ARALDITE[®] DW 0133 Red ARALDITE[®] DW 0136 Brown ARALDITE[®] DW 0137-1 Black ARALDITE[®] DW 0138 Grey ARALDITE[®] DW 0139 Red

Colouring pastes for epoxy casting resin systems

The uniform and homogeneous colouration of filled or unfilled **Applications** ARALDITE casting resin systems.

The colouring paste is preferably added to the resin and blended with it **Processing** to produce a homogeneous mix.

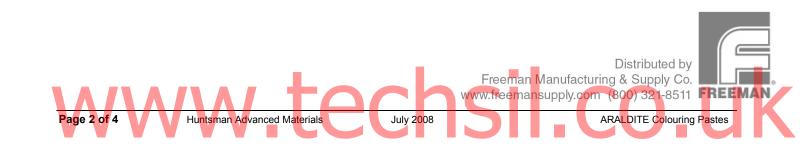
Minor effects on the processing and end properties of a casting resin systems.

Light and heat resistant.

Edition: July 2008 Replaces Edition: --Distributed by Freeman Manufacturing & Supply Co. www.freemansupply.com (800) 321-8511

Solvent free colouring pastes based on bisphenol A epoxy resin					
ARALDITE DW 0131	Flash point	DIN 51 758	°C	>150	
to DW 0139	Vapour pressure at 180°C		Ра	10	
	Size of pigment particles		μm	<u><</u> 50	
	As supplied form	Slightly thixotropic paste			
	Hazardous decomposition products	Carbon monoxide, carbon dioxide and other toxic gases and vapours if burned			
	Disposal	Regular procedures approved by national and/or local authorities			

StorageThe components have to be stored under dry conditions at 18-25°C, in tightly sealed
original containers. Under these conditions, the shelf life will correspond to the expiry
date stated on the label. After this date, the product may be processed only following
reanalysis. Partly emptied containers should be closed tightly immediately after use.
For information on waste disposal and hazardous products of decomposition in the
event of fire, refer to the Material Safety Data Sheets (MSDS) for these particular
products.



Processing (guideline values)

The filled resin component should be stirred and homogenized in the original container before use.

The casting mix is best prepared by heating the resin up to 40-50°C before stirring in the hardener. Brief degassing of the mix under 5-10 mbar vacuum improves the mixture homogeneity ad enhances the dielectric properties of the castings.

The colouring paste should normally be added to the resin component and mixed with it until a homogeneous colouration results. Prefilled, highly viscous resin components are best heated to 40-60°C to facilitate uniform dispersion of the colouring paste.

When pigmenting unfilled resins, the covering power of Red (DW 0133) and Brown (DW 0136) can be enhanced by adding some White (DW 0131). Depending on the amount of white added, shades ranging from pale to dark can be obtained.

Coloured resin or mixes of several colouring pastes and resins are stable for some considerable time if stored at room temperature.

As a rule, 0.5 to 5.0 parts by weight colouring paste are added to 100 parts by weight resin. Such additions up to 5% on the weight of the resin have virtually no effect on the end properties of an unmodified resin-to-hardener mix. If more than 5% colouring paste is used, the amount of hardener used will have to be increased accordingly.

Hardeners can be coloured to a limited extend (e.g. to facilitate visual control of a mixing operation) provided that	Colouration of the hardener component
 not more than 2 parts of weight are added to 100 parts by weight bardener. 	

- not more than 2 parts of weight are added to 100 parts by weight hardener
- the hardener and colouring paste are blended immediately to produce a homogeneous mix.

Hardener components coloured as described will remain stable at room temperature for several weeks.

When seeking to match a colour it should be kept in mind that the obtained shade will depend on the thickness of the epoxy insulation, the resin / hardener system utilized, the type and amount of filler and other additives incorporated in the mix.

The processing of coloured casting resin in contact with the air at temperatures of 160°C to 180°C, or prolonged postcuring at temperature above 150°C, may lead to darkening of the resin system and to undesirable changes in the colour shade of the surface of castings.



Note

ARALDITE is registered trademark of Huntsman Corporation or an affiliate thereof.

Registered trademark

Huntsman Advanced Materials warrants only that its products meet the specifications agreed with the buyer. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications.



The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication.

While all the information and recommendations in this publication are, to the best of our knowledge, information and belief, accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE. IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

The behaviour of the products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which are not known to Huntsman Advanced Materials. It is the responsibility of the user to evaluate the manufacturing circumstances and the final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Advanced Materials containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent on manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

Except where explicitly agreed otherwise, the sale of products referred to in this publication is subject to the general terms and conditions of sale of Huntsman Advanced Materials LLC or of its affiliated companies including without limitation, Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., and Huntsman Advanced Materials (Hong Kong) Ltd.

Huntsman Advanced Materials is an international business unit of Huntsman Corportation. Huntsman Advanced Materials trades through Huntsman affiliated companies in different countries including but not limited to Huntsman Advanced Materials LLC in the USA and Huntsman Advanced Materials (Europe) BVBA in Europe.

October 31, 2008

Printed in Hong Kong

