Electrical Insulation Materials

HUNTSMAN

Light Electrical

®Araldite Casting Resin System

Araldite® DW 0131 White
Araldite® DW 0132 Yellow
Araldite® DW 0133 Red
Araldite® DW 0134 Green
Araldite® DW 0135 Blue
Araldite® DW 0136 Brown
Araldite® DW 0137-1 Black
Araldite® DW 9134 Grey

Colouring pastes for epoxy casting resin systems

Applications

The uniform and homogeneous colouration of filled or unfilled Araldite casting resin systems

Processing

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

Properties

Minor effects on the processing and end properties of a casting resin systems
Light and heat resistant

Edition: **Jul 2014**
Replaces edition: May 2009

Product data

(Guideline values)

Araldite DW 0131 to DW 9134

Solvent free colouring pastes based on bisphenol A epoxy resin

Flash point	DIN 51 758	°C	>200
Vapour pressure at 180°C		Pa	10
Size of pigment particles		µm	≤50

		Color Code		Viscosity (25°C) Pas	
DW 0131	(white)	RAL 1013		60-160	
DW 0132	(Yellow)	RAL 1021		20-60	
DW 0133	(Red)	RAL 3000		40-110	
DW 0134	(Green)	RAL 6026		20-70	
DW 0135	(Blue)	RAL 5015		30-120	
DW 0136	(Brown)	RAL 8016		20-40	
DW 0137-1	(Black)	RAL 8022		50-125	
DW 9134	(Grey)	RAL 7035	ANSI 70 grey	100 - 230	cycloaliphatic

For outdoor use

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

Storage

Store the components in a dry place 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 after reanalysis. Partly emptied containers should be tightly closed immediately after use.
For information on waste disposal and hazardous products of decomposition in the event of a fire, refer to the Material Safety Data Sheets (MSDS) for these particular products.

Processing

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 and enhances the dielectric properties of the castings.

Colouration of the resin component

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 Yellow (DW 0132), Red (DW 0133), Green (DW 0134), Blue (DW 0135) 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.

Colouration of the hardener component

Hardeners can be coloured to a limited extend (e.g. to facilitate visual control of a mixing operation) provided that

- not more than 2 parts by 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.

Colour of castings

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 temperatures above 150°C, may lead to darkening of the resin system and to undesirable changes in the colour shade of the surfaces of castings.

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