
®Araldite Casting Resin System

Araldite® **CW 2243-2 L Blue** **100 pbw**
Aradur® **HY 842** **20 pbw**

Optimally filled casting system for processing and curing at room temperature or slightly higher temperatures

replaces CW 2243 L Blue

Small transformers
(line transformers, switch-mode, coils, chokes)

Applications

Casting / Vacuum casting

Processing

Flexible castings with good thermal ageing stability
Good thermal shock resistance
Flammability: UL 94 approval (V-0 for 6 mm)

Properties

Product data

(Guideline values)

Modified, solvent free epoxy resin with inorganic filler

Araldite CW 2243 2 L Blue	Viscosity	ISO 12058	at 25°C	mPa s	ca. 9000
	Specific gravity		at 25°C	g/cm ³	1.61
	Flash point	ISO 1523		°C	>177
	Filler content			%	59
As supplied form	Highly viscous, filled blue liquid				
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				

Formulated, low viscosity polyamine hardener

Aradur HY 842	Viscosity (Heoppler)	ISO 12058	at 25°C	mPa s	400 - 700
	Specific gravity		at 25°C	g/cm ³	0.95
	Flash point	ISO 1523	DIN 51 758	°C	155-166
	As supplied form	Brown liquid			
Hazardous decomposition products	Carbon monoxide, carbon dioxide and nitric oxides 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.

Mix ratio	Araldite CW 2243-2 L Blue	parts by weight	100
	Aradur HY 842	parts by weight	20

Processing data (Guideline values)	Initial viscosity (Hoeppler)	mPa s	at 25°C	2640
			at 40°C	945
	Time to double initial viscosity (Hoeppler)	min	at 25°C	65
			at 40°C	25
	Minimum curing time	h	at 25°C	≥ 48
			at 40°C	16
at 60°C			8	

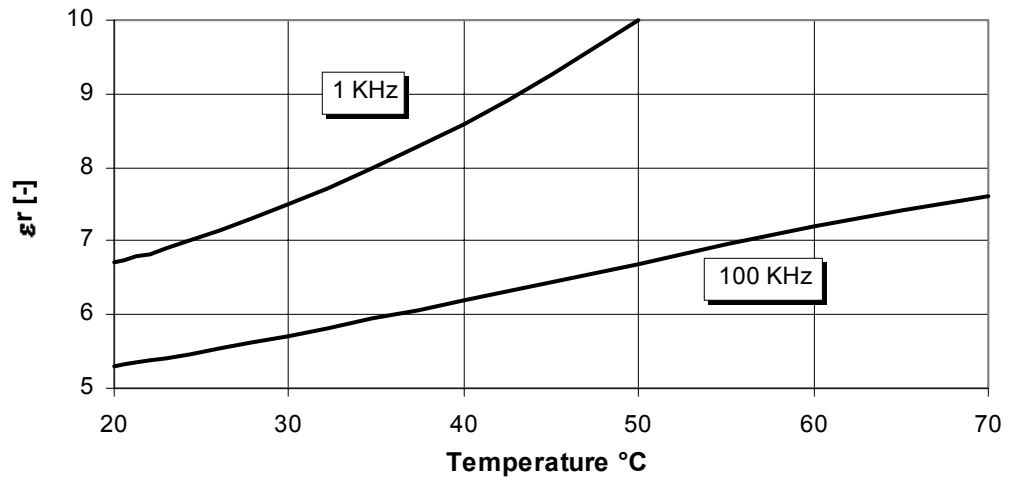
Properties

Guideline values determined on standard test specimens cured for 24 h/25°C+6 h/60°C

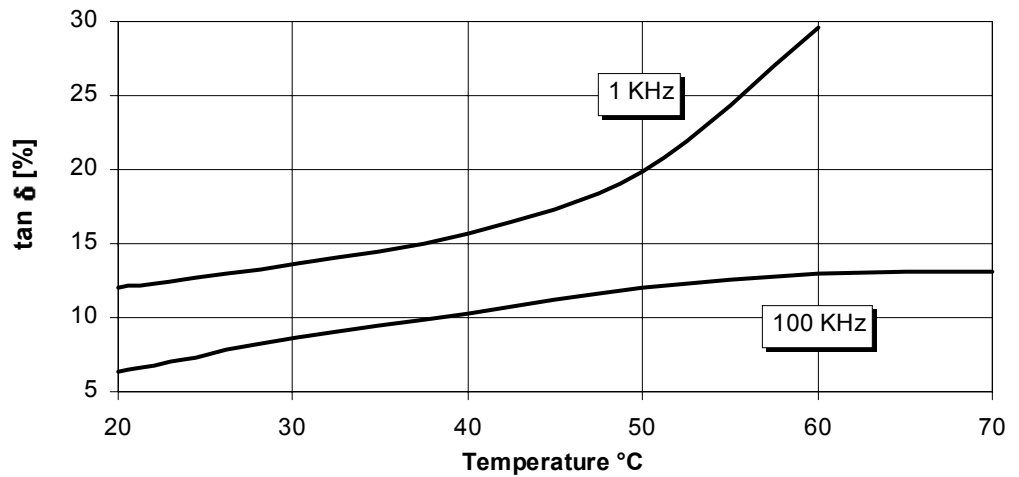
Colour of casting				Blue
Specific gravity	at 25°C	DIN 55 990	g/cm ³	1.50
Shore D hardness (4 mm plate)	at 25°C	DIN 53 505		47
Glass transition temperature/ Tg midpoint (DSC, Mettler TA 3000)			°C	15
Tensile strength				
max. tensile stress	at 25°C	ISO 527	MPa	7
elongation	at 25°C	ISO 527	%	30
Elastic modulus from tension test	at 25°C	ISO 527	MPa	30
Flammability		UL 94	grade	V-0 (6 mm)
Water absorption				
1 day	at 23°C	ISO 62	%	0.6
30 min	at 100°C	ISO 62	%	0.7
Coefficient of linear thermal expansion	at 24-105°C	DIN 53 752	ppm/K	167
Thermal conductivity	at 23°C	DIN 52 612	W/mK	0.58
Electrolytic corrosion		DIN 53 489	grade	AB/1.4
Tracking resistance		IEC 60112		CTI>600
Electric strength				
20 s value for 2 mm plate (50 Hz)	at 23°C	IEC 60243	kV/mm	23

Properties

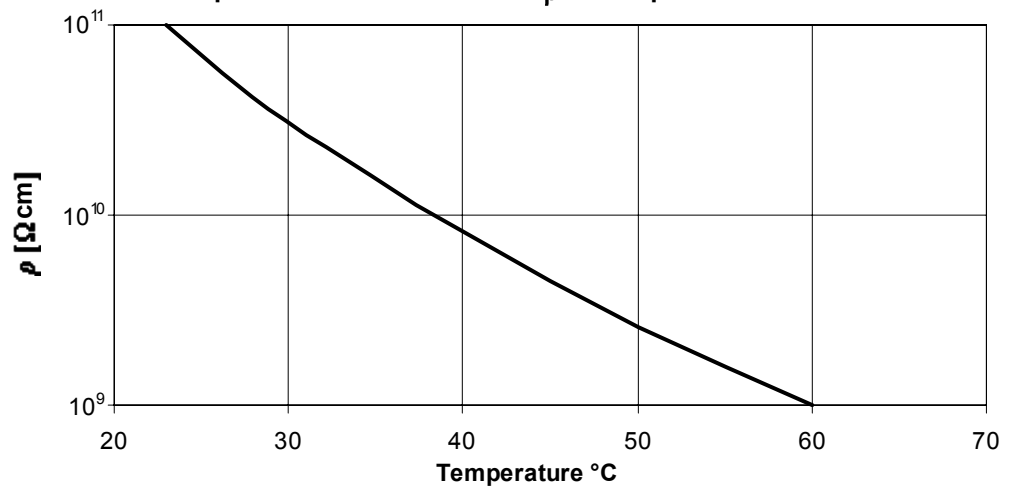
Dielectric constant ϵ_r vs temperature (DIN 53483)



Loss factor $\tan \delta$ (DIN 53483)



Specific volume resistance ρ vs temperature DIN 53482



Industrial hygiene

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please consult the corresponding Safety Data Sheets and the brochure "Hygienic precautions for handling plastics products".

Handling precautions

Safety precautions at workplace:	
protective clothing	yes
gloves	essential
arm protectors	recommended when skin contact likely
goggles/safety glasses	yes
respirator/dust mask	no
Skin protection	
before starting work	Apply barrier cream to exposed skin
after washing	Apply barrier or nourishing cream
Cleansing of contaminated skin	Dab off with absorbent paper, wash with warm water and alkali-free soap, then dry with disposable towels. Do not use solvents
Clean shop requirements	Cover workbenches, etc. with light coloured paper. Use disposable breakers, etc.
Disposal of spillage	Soak up with sawdust or cotton waste and deposit in plastic-lined bin
Ventilation:	
of workshop	Renew air 3 to 5 times an hour
of workplace	Exhaust fans. Operatives should avoid inhaling vapours.

First Aid

Contamination of the **eyes** by resin, hardener or casting mix should be treated immediately by flushing with clean, running water for 10 to 15 minutes. A doctor should then be consulted.

Material smeared or splashed on the **skin** should be dabbed off, and the contaminated area then washed and treated with a cleansing cream (see above). A doctor should be consulted in the event of severe irritation or burns. Contaminated clothing should be changed immediately.

Anyone taken ill after **inhaling** vapours should be moved out of doors immediately. In all cases of doubt call for medical assistance.

Note

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