

Araldite CW 2245

Epoxy cast resin system

Araldite CW 2245 is a minerally filled, modified, epoxy casting system for processing at room temperature or slightly increased temperatures.

Range of application is small transformers, flyback transformers, isolation transformers, coils, throttles.

OVERVIEW

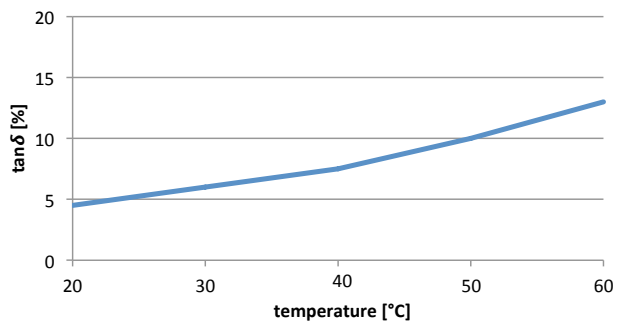
- good temperature-resistance
- solvent-free epoxy resin
- flame retarding characteristics after UL 94 (V-0 with 6 mm layer thickness for CW 2245)

PHYSICAL SPECIFICATIONS			
Composition	RESIN CW 2245	HARDENER GP 456	MIXTURE CW 2245/GP 456
Mixing ratio by weight	100	9	-
Base	Epoxy	Polyamine	-
Colour visual	white	light yellowish to yellow	beige
Viscosity at 25 °C (mPa·s)	approx. 18.000	approx. 450 (Hoepler)	7.500
Density g/cm ³	1.65	1.02	1.61
Pot life for 500 ml at 20 °C (min)	-	-	30
Curing time depending on layer thickness at 25 °C (h)	-	-	≥ 24
			12
			6

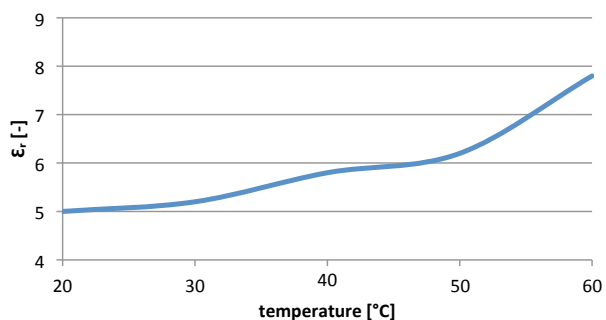
Reference values, based on standard test samples, hardening: 24h/25 °C and 6h/60 °C

Shore hardness D (4 mm plate) at 25 °C	DIN 53505		80
Dimensional stability after Mertens	DIN 53458	°C	54
Tensile shear strength at 25 °C			
Max. tensile strength	ISO /R 527	MPa	36
Elongation at break	ISO /R 527	%	0.8
Elastic modulus from tensile test at 25 °C	ISO /R 527	MPa	5500
Water absorption			
1 d at 23 °C	ISO 62	%	0.17
30 min at 100 °C	ISO 62	%	0.23
Linear coefficient of thermal expansion at 20–40 °C	DIN 53752	ppmK ⁻¹	69
Thermal conductivity with 25 °C	DIN 52612	W/mK	0.67
Electrolytic corrosion (characteristic value A-1)	DEN 53 489		A/1.2
Tracking resistance	IEC 112		CTI >; 600
Dielectric strength	IEC 243	kV/mm	16
20-s-value at 2-mm-plate at 25 °C (50 Hz)			

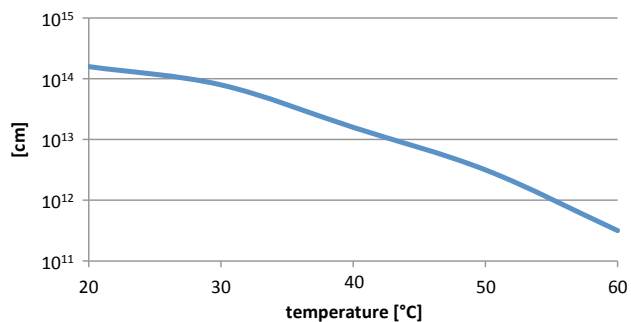
Loss factor $\tan\delta$ /temperature at 50 Hz (DIN 53483)



Dielectric constant ϵ_r /temperature (IEC 250/DIN 53483)



Specific resistivity ρ /temperature (DIN 53482)



PROCESSING INSTRUCTIONS

Due to sedimentation tendencies of filled resins, material has to be stirred up before material withdrawal from the original container. This measure is particularly important before a partial withdrawal, in order to avoid false dosages.

High-filled components have to be warmed up in the original container to 40–60 °C (e.g. over night in the oven), in order to facilitate a stirring up and the withdrawal. For processing of the casting resin the hardener portion is to be thoroughly stirred into the preheated (40–50 °C) resin. Brief vacuuming of the casting resin in a vacuum range from 5–10 mbar improves the homogeneity as well as the dielectric characteristics of the material.

FORM OF DELIVERY

Resin: Araldite CW 2245 25 kg	Hobbock	Article no. 6cw224525
---	---------	---------------------------------

Hardener: GP 456	200 g 1 kg 5 kg	PE bottle PE bottle PE canister	Article no. 8h456.000 8h456.001 8h456.005
----------------------------	-----------------------	---------------------------------------	---

HANDLING PRECAUTIONS

Gössl + Pfaff products can be processed without danger, provided that the handling precautions usual in handling chemicals are kept.

Unhardened materials are to be kept away from food. In order to avoid allergic reactions, it is urgently recommended to wear impermeable rubber or plastic gloves, eye protection and one-way protective clothing.

After each working day, as well as before breaks and using the toilet, the hands must be thoroughly washed with warm water and soap.

The use of solvents is to be avoided. Afterwards the skin is dried with paper cloths – no textiles. The work space should be well ventilated; maybe suction device above work space.

Safety data sheets are deposited in the Internetshop under www.goessl-pfaff.de with the respective product.

They contain a listing of the product specific precautionary measures and are absolutely to be considered!

STORAGE

The individual components must be stored tightly closed and dry and should remain in the original containers if possible.

Under these conditions the shelf-life corresponds to the date of expiry indicated on the labels.

Filled components are to be stored because of their sedimentation tendency favourably at temperatures of 15–20 °C.

INFORMATION

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of Gößl + Pfaff GmbH products, under their own conditions before commencing with the proposed application. Gößl + Pfaff GmbH guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. Gößl + Pfaff GmbH disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of Gößl + Pfaff GmbH is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.