

2-Component Flame-Retardant Epoxy System

Resin

WELA EP 50FR

Hardener

WELA EH 52FR

Application

WELA EP 50FR + WELA EH 52FR is a flame-retardant, solvent-free epoxy system for infusion and RTM applications, which is infusion capable for 30 - 40 minutes at a processing temperature of 40 °C. Typically this infusion system is cured at a temperature level of 100 - 130 °C. Resulting components grant good flame protection properties. After short curing cycle a TG > 100 °C is obtained.

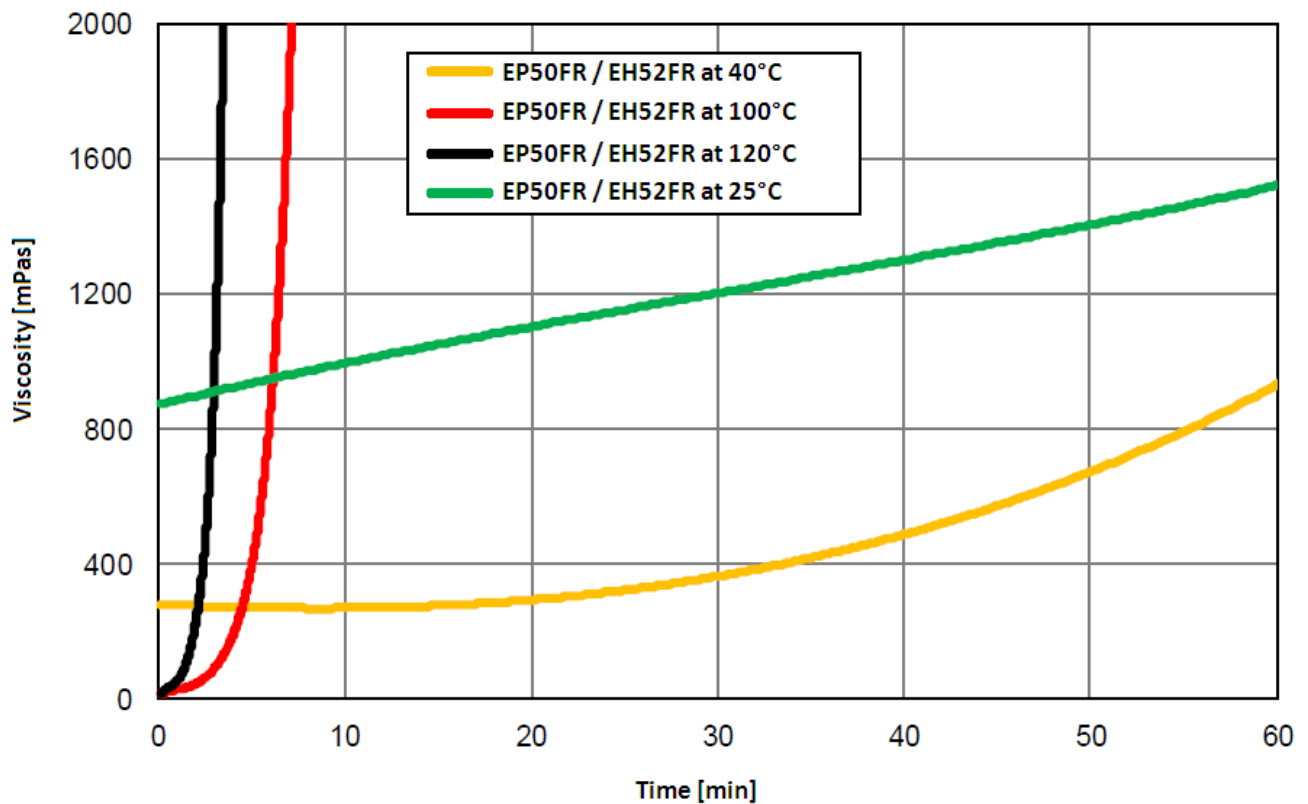
Physical Properties

Physical properties			
Material	-	EP 50FR	EH 52FR
Mixing ratio by weight	-	100	17
Viscosity at 25 °C	mPas	2600-2800	8
Viscosity at 40 °C	mPas	550-570	-
Epoxy equivalent	g/equiv.	185-200	-
Amine equivalent	g/equiv.	-	33
Density at 20 °C	g/cm ³	1,189	0,932
Initial mixing viscosity at 40 °C	mPas	250-270	
Gel time at 60 °C	min	45-55	
Time below 500mPas	min	40	
Minimum cure	-	90min at 125 °C	
TG, Inflex. point (90min at 125 °C)	°C	106	

Note

All information, recommendations and suggestions whether orally, in written form or in database, are provided to the best of our knowledge and belief. However, they may not be construed as legally binding statements and do not represent the basis of either a guarantee or specification. The same applies analogously to the data parameters stated for example of cured binder. This information, these recommendations and suggestions describe our products and possible applications in general or exemplary terms., but do not refer to special cases. Changes in the data parameters, texts and illustrations can result from the constant process of technical development and improvement of our products. Our support does not free the customer from the obligation to conduct his own review on our current information literature, in particular our product data sheets and safety data sheets. The customer must carry out tests of our products on its own responsibility to determine their suitability for the intended process and uses, as well as to establish whether their processing characteristics are appropriate in a specific case, since the technical uses of our products are numerous and can vary widely in a specific instance. Therefore, such factors do not fall within our control and are the exclusive responsibility of the customer. Wela cannot be held responsible for damages or accidents that accrue during the use of our products.. The responsibility of WELA is confined to refund products that do not correspond to their specification.

Viscosity development



Shelf life and storage

Store this material in a clean, dry environment in its tightly closed original container. This product is not considered especially temperature or moisture sensitive, but should ideally be stored at temperatures between 18 and 25 C and kept from moisture contamination. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

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