

## 8. EDHESIVES ELFIX/ Epoxy adhesives/ **ELFIX 510**



CABLES



IMPREGNANTS



WIRES



RESEARCH

### Application:

ELFIX 510 is suitable as adhesive for metals, glass, porcelain, various kinds of thermosetting materials, wood and others. It can be used for trickling, sealing, insulating etc. After curing ELFIX 410 can be treated respectively covered with coat.

### Characteristics:

Two-component ELFIX 510 insulating paste is based on modified epoxy resin. It is cured at ambient as well as at elevated temperature. Its adhesion to other materials e.g. to metals, glass, wood, porcelain, concrete and various kinds of thermosetting materials is very good. Its chemical resistance is good too and its curing shrinkage is small. Its adhesion to elastomeric materials, fat and dirty surfaces is poor. Electrical and mechanical properties of ELFIX 410 are good.

### Processing:

Two (2) weight parts of yellow component and one (1) weight part of grey component are properly mixed together. This must be done very carefully to avoid the mixing of air bubbles. Pot life of mixture depends on mixture quantity and processing temperature.

### Approximative data are as follows:

Quantity [g]	Temperature [°C]	Time [min.]
	10 - 15	90 - 100
10 - 50	20 - 30	40 - 50
	50 - 60	10 - 15
	10 - 15	40 - 50
50 - 500	20 - 30	20 - 30
	50 - 60	5 - 10



**VUKI**  
SINCE 1950

F-11.1.22-31-2/11en

## 8. ADHESIVES **ELFIX**/ Epoxy adhesives/ **ELFIX 510**



CABLES



IMPREGNANTS



WIRES



RESEARCH

### Curing:

Curing time depends on mixture quantity and curing temperature. Curing time for larger quantity is shorter.

Curing time at 20 - 30 °C, [h]	3 - 5
Post curing time to reach optimal properties	
at 20 - 30 °C, [h]	12 - 24
at 100 °C, [h]	1

### Properties of component:

<b>Viscosity 20 °C, [mPa.s]</b>	
grey component	105
yellow component	105
30 min. after mixing	105
<b>Density 20 °C, [g/cm<sup>3</sup>]</b>	
grey component	1,28 – 1,3
yellow component	1,42 – 1,45
Storage life of separate components in original packing:	1 year

### Properties of component:

Measured on test specimens cured for 48 hours at 25 °C	
Tension strength, [MPa]	24
Flexural strength, [MPa]	36
Impact strength Charpy, [N.mm/mm <sup>2</sup> ]	7,0
Dissipation factor at 50 Hz/23 °C/50 % r.h. [%]	4
Permittivity 50 Hz/23 °C/50 % r.h.	4,44
Volume resistivity, [Ω .m]	1012
Electric strength, [kV/mm]	14

The information provided herein accords with our knowledges about the subject on the date of publication. This information might be revised if new knowledges and experience will be available. The data provided fall within the normal range of product properties are related only to the specific material. These data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to set limits or used alone as the basis for design. The data are not intended for substitute of any testing that you might need to do for decision if the specific material is suitable for your particular purposes. Since VUKI ca not anticipate all variants in actual end-use conditions, VUKI makes no warranties and assumes no liability in connection with any use of this information. Nothing in this document is to be considered as a license to application or recommendation to infringe any patent rights.



**VUKI**  
SINCE 1950

F-11.1.22-31-2/1en