SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

WEVOSIL 22006 FL

Solvent-free, addition-curing two-component silicone-based casting resin system

Attributes

The resulting soft-elastic molded material is characterized by good low-temperature flexibility and excellent behavior in the temperature shock test. Recommended temperature range: -60 °C to +180 °C.
The resin is processed together with WEVOSIL 22006 FL B.

Application

- Pressure-sensitive electrical components
- complete assemblies in SMD technology
- thermally conductive adhesive and potting as well as molded parts made of this material

Standards

- Temperature application range -60 °C - +180 °C
- Isolation class H
- RTI 180 °C
- UL 94 V0 (4 mm)

Delivery forms

10 kg and 30 kg containers

Color

WEVOSIL 22006 FL A: Nature
WEVOSIL 22006 FL B: Black

Storage

Polymer (A-component) and crosslinker (B-component) must be stored dry and at a temperature of 5 °C to 30 °C and not in the open air. The containers should be stored upright and not directly on the cold floor (floor temperature not below 5 °C). WEVOSIL 22006 FL has a shelf life of 6 months after production.
At temperatures above 25 °C, the settling of the fillers contained in the casting compound is accelerated. The potting compound is then more difficult to homogenize.

Hardening

- Pot life: 90 - 120 minutes at room temperature, depending on layer thickness and casting volume.
- Curing time: 6 hours at room temperature, 1 hour at 100°C

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

- Final chemical curing: several days at room temperature

Curing notes:

- Excessive humidity has a damaging effect on the uncured compound. If necessary, curing should take place in an air-conditioned room, a container with low humidity or in an oven.
- Curing at an elevated temperature (50 - 100°C) accelerates the curing reaction and can influence the adhesion of the potting compound to the walls of the component.
- The WEVOSIL 22006 FL casting compound reaches its final hardness after a few days at room temperature.
- After approx. 6 hours curing at room temperature (or 1 h @ 100 °C) approx. 90 - 95 % of the Curing takes place. To achieve the final hardness, post-curing can then be carried out for 2 hours at 165 - 180 °C. However, this last step is not absolutely necessary. After a few days, the casting compound reaches its final hardness even at room temperature (depending on the system).
- Electrical tests of the component quality can usually be carried out after the first curing (6 hours at room temperature or 1 h @ 100 °C).

Protection

Our products are intended solely for industrial use. For further details, please refer to the safety data sheet.

Processing

Our processing instructions please find here.

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

General	Unit of measure	Condition	Value	Test method
Mixing ratio	Gew-%		100:100	
Pot lilfe	min	25 °C	90-120	
Curing time	h	25 °C	6	
Curing time	h	100 °C	1	

Mechanical	Unit of measure	Condition	Value	Test method
Density	g/cm³	WEVOSIL 22006 FL A	1.36-1.40	
Density	g/cm³	WEVOSIL 22006 FL B	1.36-1.40	
Viscosity	mPas	WEVOSIL 22006 FL B / 22 °C	2000-2800	
Viscosity	mPas	WEVOSIL 22006 FL A / 22 °C	2000-2800	
Mixture viscosity		22 °C	2000-2800	
Hardness	Shore A		47-55	Acc. to ISO 48-4
Water absorption	%	30 d, RT	<0.2	
Elongation at break	%		90	ISO 527-2

SynFlex Elektro GmbH
Auf den Kreuzen 24
D-32825 Blomberg Germany
Telefon +49-5235-968-0
E-Mail info@synflex.de

Thermal	Unit of measure	Condition	Value	Test method
Thermal class			H	DIN EN 60085
Glass transition temperature	°C		-50	TMA
Thermal conductivity	W/m*K		0.5	ISO 22007-2:2008

Electrical	Unit of measure	Condition	Value	Test method
Dielectric strength	kV/mm		33	DIN EN 60243
Dielectric constant ε at 50 Hz, 23 °C			3.8	DIN EN 60250
Dielectric constant; at 1 kHz, 23 °C			2.7	DIN EN 60250
Dielectric constant ε at 1 MHz, 23 °C			2.4	DIN EN 60250
Volume resistance specific at 23 °C, 50 % r.h.	Ωxcm		>10^11	DIN EN 62631-3-1:2016
Surface resistivity at 23°C and 50 % r.h.	Ω		>10^14	DIN EN 62631-3-2:2016