MASSIVIT

BUILDING TRUST

SikaBiresin® CIM 120

SikaBiresin® CIM 120 is an aluminium-filled, epoxy material co-developed with Sika for the Massivit 10000 series. This advanced digital material provides high-speed tooling for applications that require elevated temperatures.

Key Advantages:

- High heat resistance
- Good mechanical properties after post curing
- High-dimensional accuracy with low shrinkage
- Good vacuum retention
- Good workability after post curing
- Enables isotropic molds

Applications

- Composite molds
- Vacuum forming tools
- Jigs and fixtures
- Masters

SikaBiresin® CIM 120 - Technical Data Sheet

Character	Method	Metric	Imperial
Mechanical Properties			
Izod Impact	ISO 179	12 [kJ/m²]	5.7 [ft-lb/in²]
Shore Hardness	ISO 868	88D	88D
Tensile Properties			
Flexural modulus	ISO 178	8,150 [MPa]	1,182,058 psi
Flexural strength	ISO 178	90 [MPa]	13,053 psi
Compressive strength	ISO 604	110 [MPa]	15,950 psi
Thermal Properties			
Coefficient of thermal expansion	DIN 53752	40 [ppm/°k]	22 [ppm/°F]
Heat Deflection Temperature *	ISO 75B	125 [°C]	248 [F]

* Values after post curing

Physical properties

Character	Tested value
Component A viscosity	75,000 mPa.S
Component B viscosity	100 mPa.S
Mix Ratio by Weight	100A:10B
Mix Viscosity	6,700 cP
Specific Gravity	1.8 g/cm3
Pot Life @RT (500gr)	4 hours
Cure time	24 hours, followed by post cure
Mixture Color	Dark grey

All measurements were done on lab specimens of cured material, followed by post - cure process. The specifications stated above refer to the Beta aversion and results were derived from internal lab tests. The material above is under R&D development.

Post-Curing Process

To meet the specified properties, SikaBiresin® CIM 120 should be heat-cured in a dedicated industrial oven. Consult Application Note for detailed instructions. Post - cured SikaBiresin® CIM 120 specimens can be milled, polished, or coated with a suitable coating or paint. Let coating fully dry before putting part into service.

Storage

The material base -A and hardener -B should be stored in a dry place in the sealed original container at temperatures between +2˚C and +40˚C. Under these storage conditions, the shelf life is one year. The product should not be exposed to direct sunlight.

Precautionary Statement

Massivit maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

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Available in H2 2024, subject to R&D changes.

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