Swiss Vascular GmbH
Gotthardstrasse 25
CH-8002, Zurich
Switzerland
info@swiss-vascular.ch
swiss-vascular.ch

Technical Datasheet (TDS)
Silicone Vascular Model by Swiss Vascular GmbH

1. Product Name and Description

Product Name: Silicone Vascular Model

Description: This silicone vascular model is made using SV-45, SV-25, SV-5, and SV-0, an addition-curing medical grade silicone rubber, ideal for general molding, fabric coating, and electrical insulating material.

2. Technical Specifications

	#SV-ACA-002-W
Model Type	Silicone Vascular Model
Material Options	SV-45, SV-27
Color Options (transparent)	white, yellow, orange, red, violett, blue, green
Dimensions	188 x 114 x 83 mm
Mass	1.96 kg
Connector Type	Luer lock 3/16"
Smallest Vessel Diameter	900 μm
Max. pressure	250 mmHg
Max. flow	1200 ml/min

3. Material Properties

	SV-45	SV-27	SV-5	SV-0
Color	Transparent/ Yellowish	Transparent/ Clear	Transparent/ Yellowish	Transparent/ Clear
Density at 20°C	1.10 g/cm³	1.03 g/cm³	1.03 g/cm³	1.03 g/cm³
Shore A - Hardness:	45	27	5	0 (Shore 00-20)
Tensile Strength:	3.0 - 3.5 N/mm²	0.5 N/mm²	2.0 N/mm²	0.6 N/mm²
Tear Resistance:	2.0 - 2.5 N/mm	8.0 N/mm	8.0 N/mm	4.0 – 6.0 N/mm
Elongation at Break:	100 - 110%	120%	200%	200%
Operating Temperature:	-50°C to +180°C	-50°C to +180°C	-50°C to +180°C	-50°C to +180°C

4. Key Features

Human-like softness for a more natural feel
Vascular-like friction resistance for enhanced performance
Medium Shore A hardness, offering a balance between flexibility and durability
Excellent tear resistance and elongation properties

5. Applications

Ideal for creating accurate vascular models for medical training and research
Suitable for mold-making, fabric coating, and use as an embedding and electrical insulation material

6. Storage and Handling

Initial Inspection: Thoroughly examine the vascular model for any visible defects, irregularities, or damage. Pay particular attention to the integrity of the vascular structures, ensuring that they are free from defects or deformities.
Verify the model's dimensions, ensuring that it aligns with the specifications provided by Swiss Vascular. Use appropriate measuring tools, if necessary, to confirm accuracy.

Storage Recommendations: Once unpacked and inspected, store the Vascular Brain Model in its case or in a clean, dry, and controlled environment. Protect the model from excessive sunlight, dust, and potential contaminants to preserve its integrity and longevity.

7. Disclaimer

This data is based on our current knowledge and experience. The user must verify the product's suitability for the intended application.

8. Warnings and Precautions

Professional Use Only: The vascular model is intended for use by qualified professionals familiar with cerebral vasculature. Improper use by untrained individuals may result in inaccurate representations or misinterpretations.

Handling and Storage: Ensure that the model is handled and stored in a clean environment. Protect the model from prolonged exposure to direct sunlight and minimize dust accumulation to maintain its integrity and accuracy.

Maintenance: Regularly inspect the model for signs of wear, damage, or degradation. Clean the model using appropriate methods and materials to ensure optimal visibility and functionality.

Avoid Sharp Tools: The vascular model is sensitive to damage from sharp-edged tools or devices. Exercise caution when using instruments near the model to prevent accidental punctures or abrasions.

Swiss Vascular's products are not medical devices and are not intended for the diagnosis, treatment, cure, or prevention of any health condition. These products are specifically designed for training purposes, and their safety and effectiveness as medical devices have not been validated.

9. Potential Hazards and Risks

Material Sensitivity: Some individuals may be sensitive or allergic to certain materials used in the construction of the model. Monitor for any adverse reactions and discontinue use if irritation occurs.