

**A:** 



Cables cannot compromise patient lives and safety, and they must also withstand cleaning, disinfection or handling and earn agency certifications. Therefore, medical equipment OEMs must have complete certainty that the cables they choose are suitable for their design. SAB North America provides a wide variety of safe, reliable cables for use in medical laboratory, operating room and monitoring environments, including the new SABmed line of cable compounds.

With expertise in both standard and specialty cable types, SAB can answer cabling questions that pertain to your unique medical device design. Here is a sample of some of the questions we often answer for medical device OEMs:

- **Q:** How can I achieve the most flexible connection cable possible?
  - There's more to flexibility than just the conductor materials inside your cable. Once you have defined your cross sections by calculating the electrical resistance and current load, SAB will help you choose from the various shields, tapes, insulation and outer jacket materials available to enhance your cable's flexibility. Since there are no standard criteria for flexibility, it's important to work with your medical cable vendor to achieve your desired result.



## **Q:** The outer jacket of my silicone cable is too sticky and highly susceptible to dirt. What can I do?

Raw silicone is a very tacky material. Using modern chemical processes, SAB North America can treat raw silicone and modify its surface to reduce its adhesive properties according to customer requirements. And with modern process control tools and expert engineering, we not only achieve reproducible results, we can even eliminate the "blooming effect" caused by compounds that migrate to the cable surface.

## **Q:** My cable does not match the color of my device. What should I do?

- The outer jacket color of your cable should be in harmony with the color of your medical device. SAB North America offers a wide range of colors to use for your design. Since the cable surface affects the user's color perception, SAB North America produces customer-specific sample batches to ensure the cable's color correctness during production.
- **Q:** In order to earn certification for my prototype device, I need to prove the device was produced on serialized machinery. Can a cable manufacturer guarantee their cable's serialized parts, including samples?
- **A:** To make sure that our products can be used for prototypes, SAB North America manufactures cables exclusively on serial machines. This also ensures complete traceability throughout the production chain as well as constant quality for every succeeding production run.





**Medical Applications** 

FAQ's

Proper outer jacket material selection is critical to preventing skin reaction for patients. SABmed cable materials are proven biocompatible in accordance to ISO 109335-5 testing for cytotoxicity. These tests exposed the materials to vital cells for a specific time period, after which the percentage of vital cells that were present far exceeded the ISO's minimum requirement.

## **Q:** What jacket options does SAB offer?

A: SABmed S-range is a silicone based material with a smooth surface, very pliable and high-temperature resistance. UL Certified power, data, bus, connection, or single-core cables for medical devices. Easy to grip and slide non-stick jacket does not require a parabellum coating.

**SAB**med T-range is characterized by an increased resistance to indentation making the cable smoother and more flexible than PVC. Furthermore, this material is halogen-free and very good for sterilization (gas and radiation) as well as for a retractable spiral cable.

SELECTION TABLE	Item group: 3900 Jacket material: SABmed S	Item group: 3901 Jacket material: SABmed T	
Biocompatibility (ISO 10993-5)	$\checkmark$	$\checkmark$	63
Wipe disinfection*	$\checkmark$	$\checkmark$	
Autoclavability (up to ±134°C)			
High flexibility	$\checkmark$	$\checkmark$	
Spiralization**			
Overmolding	$\checkmark$	✓	
Low adhesion		$\checkmark$	
Temperature range +90°C	$\checkmark$	✓	
Temperature range +180°C	$\checkmark$		
UL/CSA	$\checkmark$		TE
RoHS	$\checkmark$	$\checkmark$	

\*against commercially available wipe disinfections according to instructions for use

\*\*depending on the material combination

## Add Certainty to Your Medical Cable Selection

From imaging systems to electro therapy and surgery to dental, SABmed cables and wires provide the flexibility, biocompatibility, cleanliness and long service life medical OEMs demand for their devices. The series offers a range of cables with UL approval and an option for non-blooming. When you need to be certain your cable is capable of providing the quality and reliability your medical design demands, bring your questions to SAB North America.

