



Protecting Transistors in Medical Devices Against Moisture

Application: Saline Solution IV

Location: USA

Challenge

A medical device manufacturer approached us in search of a lubricant for their new transistor design. The transistors within this Saline Solution IV were located on a printed circuit board that was positioned next to a tube containing saline. The manufacturer was concerned that the coating on their PCB would not sufficiently prevent saline intrusion. Connector lubricants can act as a seal to keep dirt and moisture away from critical components. This customer needed a biocompatible lubricant that would seal the transistors and protect them from saline, water intrusion, and corrosion.

- Can the lubricant seal the transistor to keep out saline and prevent corrosion?
- Can we provide a small dispensing option for hand-held application?

Solution

NYEMED® 7560, 10cc Syringe

A medium viscosity, UV-dyed, synthetic hydrocarbon grease

- Provides an environmental seal to protect against moisture and oxidation
- Biocompatible against three ISO 10993 standards
- Does not swell most plastics and elastomers
- UV dye enhances tracing and visualization

Results

Given the customer's operating conditions, we provided a sample of NYEMED® 7560, a biocompatible lubricant with proven success in cable and connector applications. The customer conducted stringent validation testing which included immersing the lubricant in saline. NYEMED® 7560 passed these tests, proving that our lubricant prevented corrosion, did not interfere with electric signals, and was compatible with PCB materials. The customer implemented NYEMED® 7560 in their design and remains satisfied with its performance.

Advantages

Biocompatible

Protects against moisture & oxidation

Compatible with plastics and elastomers