MacDermid Alpha
ELECTRONICS SOLUTIONS

# GETTERS

## A MEDICAL INDUSTRY EQUIPMENT ESSENTIAL

MacDermid Alpha's **HICAP™** and **STAYSTIK®** products are developed to meet stringent industry requirements enabling hermetic package manufacturers security and peace of mind to meet industry reliability standards; including JEDEC, MIL STD 883 and NASA outgassing requirements.

Many hermetic implantable packages and modules containing integrated microelectronic devices may out gas H2, H20, CO2 and other species over time.



**Getters** are important in the **medical industry** for several key reasons:

## A Portfolio That Matches Every Need in the Industry


Artificial cardiac pacemaker

 **1.Maintaining Device Integrity:** Medical devices often contain sensitive electronic components that must operate reliably over extended periods. Getters help maintain the integrity of these components by removing residual gases.

 **2.Ensuring Safety and Accuracy:** Getters contribute to the overall safety and accuracy of implantable medical devices by creating and maintaining a clean environment within electronic packages, thus minimizing the risk of errors or failures during diagnostic or therapeutic procedures.

| Medical Industry Portfolio Spotlight | Advantage |
|---|---|
| **STAYSTIK SC3001** Microdot dispensing silver-filled electrically conductive paste | *Low stress *Bond multiple substrates |
| **HiCap2000** High-capacity moisture and CO2 getter | *One-part system *Moisture capacity ≥15% of product weight |
| **HiCap3000** High-capacity moisture and CO2 getter | *Film with pre-applied adhesive *Allows fast room temperature attach |

 **3.Supporting Long-Term Stability:** Medical devices may be used in diverse and sometimes challenging environmental conditions. Getters ensure long-term stability of electronic components by preventing the buildup of contaminants.

 **4.Enhancing Device Durability:** Medical Implantables often undergo a rigorous sterilization processes. Getters help in maintaining the durability of electronic components by safeguarding them against the effects of residual gases or impurities that might result from sterilization procedures.

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