

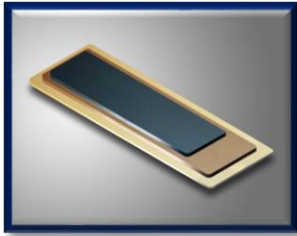
# GETTERS

## A DEFENSE INDUSTRY EQUIPMENT ESSENTIAL

MacDermid Alpha’s **STAYDRY®** and **HICAP™** 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 packages and modules containing integrated microelectronic devices, may out gas H2, H2O, CO2 and other species over time.



### A Portfolio That Matches Every Need in the Industry

Defense Industry Portfolio Spotlight	Advantage
<b>H2-3000</b> Hydrogen and moisture getter	*Irreversible hydrogen reaction *Highly permeable to both hydrogen and moisture
<b>H2-3000PSA</b> Hydrogen and moisture getter	*Irreversible hydrogen reaction *Highly permeable to both hydrogen and moisture
<b>Z20</b> Moisture getter	*Reversible moisture activation *Preapplied adhesive for easier & faster attach
<b>GA2000-2</b> Particle and moisture getter	*Two-part system *Room temperature stable

Getters are pivotal in the **defense industry** for several reasons:



#### 1. Maintaining Equipment Reliability:

Defense equipment often operates in harsh and demanding environments where reliability is critical. Getters help maintain the integrity of electronic components by trapping residual gases and impurities that could otherwise degrade performance or cause malfunctions.



#### 2. Ensuring Longevity:

Military hardware is expected to have a long operational life span. Getters contribute to this by creating and maintaining a clean, low-pressure environment within electronic packages, thereby prolonging the operational reliability of defense systems.



#### 3. Preventing Failure:

In defense applications, failure of electronic components can have serious consequences. Getters reduce the risk of component failure by minimizing the presence of contaminants that could lead to performance degradation or malfunction during critical operations.



#### 4. Enhancing Performance:

Military equipment often requires high-performance electronics that must operate consistently under extreme conditions. Getters help ensure that electronic components function at their optimal level by eliminating factors that could otherwise affect performance.