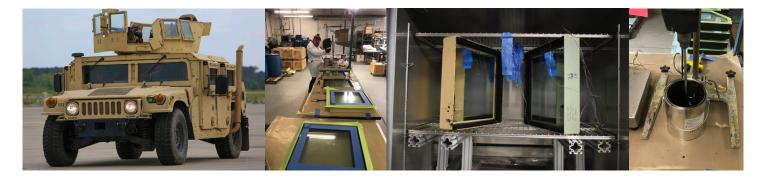


# GlassLock Potting Sealant Transparent Armor Solution



Product Name: GlassLock

Material Type: Polyurethane Sealant

Application: Transparent Armor

#### Revolutionary Advantages:

Affordable to make at scale, Easy to use, Successfully completed 6 cycles of testing required by the US Department of Defense for application on existing military vehicles

**Technology Readiness Level 5:** Technology demonstrated in relevant environment (Testing under ATPD-2352)

#### Benefits

Low Material Costs - Economical

Easily Applied

No Contaminants or Solvents

**Requires No Refigeration** 

#### **SBIR Topic**

Extended Service Life of Transparent Armor Navy SBIR 2018.1 - Topic N181-001

#### LUNA LABS CAPABILITIES

Military-Specific Materials Development Performance Evaluation& Testing Lightweight Materials & Structures Chemical & Biological Defense

## Solution

Luna Labs has developed an innovative polyurethane sealant specifically designed for transparent armor (TA), offering a durable and environmentally friendly solution. This groundbreaking sealant not only reduces maintenance and lifecycle costs for the US Marine Corps but also addresses the economical challenges posed by current TA sealants on the market.

Our solvent and contaminant-free formulation provides superior performance, significantly extending the lifespan of TA. Unlike existing sealants, Luna Labs sealant minimizes delamination, ensuring long-lasting durability. Furthermore, our solution surpasses the rigorous testing requirements of ATPD-2352, successfully completing 12 cycles on TA coupons.

# Background

Currently, the US Military faces a common problem with the relatively short lifespan of TA, which tends to delaminate within 3 to 4 years. This delamination issue not only incurs substantial costs but also hampers vehicle readiness. In fact, TA is often cited as the most unreliable component on military platforms. Considering the high cost of replacement, the Marine Corps alone spends an estimated \$15M to \$20M annually to address delamination-related issues.

## Opportunity

Our transparent armor sealant is available for purchase by contacting us at info@lunalabs.us. Luna Labs is also interested in partnerships and collaborative research and development.

#### For more information contact:

Cameron Childs - Advanced Materials Business Development Manager - cameron.childs@lunalabs.us

Material Synthesis & Characterization Material Design & Optimization Failure Analysis & Forensic Investigation System Integration & Engineering Support

Advanced Coatings & Surface Engineering Sustainability & Green Materials Collaboration & Technology Transfer