

# Epoxies, Etc. Helps Put KVH Industries in the Driver's Seat

## Background

*KVH Industries, Inc. is an international leader in developing and manufacturing innovative, mobile, high-bandwidth satellite communications systems, tactical navigation products, and fiber optic products. One of their latest innovations is TracVision A5, which brings more than 300 channels of live satellite television and music to cars, boats, RVs and motorcoaches.*

## Challenge

As part of the development of the antenna for the TracVision A5, KVH was looking for two adhesives. One that would hold two tough-to-bond materials together and dry quickly so that it would hold the materials in perfect alignment.

The other would provide a radio frequency shield, and be electrically conductive. While KVH realized that was a tall order to fill, they also knew that finding the right solutions was imperative.

## Solution

Rhode Island-based KVH turned to another local company, Epoxies, Etc., to provide solutions for their applications.

"We liked that they were local, because we knew that they would be quick to respond," said Mark Larson, the KVH engineer that worked with Epoxies, Etc. on the project. "They were very responsive and quickly developed the specialty products that we needed."

Epoxies, Etc. worked with the engineers at KVH to develop two highly specialized products to meet their needs. The first was a one-component, electrically conductive polymer, manufactured to very detailed specifications of viscosity and conductivity.

"(The conductive polymer) needs to be applied via a robotic dispensing system," said Larson. "Its ability to keep a small bead was critical."

The second product was an epoxy that could adhere the two difficult-to-bond plastics and cure quickly enough to keep the two plastics perfectly aligned. This two-part structural epoxy adhesive was developed as a result of extensive collaboration and testing between KVH and Epoxies, Etc.

"Epoxies, Etc. definitely were the ones that guided us in the tools that we should use," said Larson.

## Future

KVH Industries couldn't be happier with Epoxies, Etc. and the timely, innovative way that the company met their needs.

"Their materials guarantee that our antenna... has a tremendous success rate," said Mark Larson.

Epoxies Etc. provided KVH Industries with convenient solutions to its needs. KVH used the resulting products to provide a convenient entertainment solution to thousands of passengers across the United States.



## 40-3920 Electrically Conductive Polymer

**Packaging**  
16 ounce Jars

**Color**  
Silver

**Dispensing**  
Robotic XYZ  
Dispensing System

**Viscosity,**  
25°C, cps  
9,000

**Mix ratio**  
No mixing, one  
component

**Electrical  
Resistivity**  
Ohms/cm .0002

## 10-3046 Structural Adhesive

**Packaging**  
TriggerBond 50ml  
1:1 Cartridge

**Lap Shear, psi**  
3,500

**Dispensing Gun**  
TriggerBond 50ml  
Manual Gun

**Dielectric  
Constant, 1KHZ,**  
25°C  
4.00

**Mix ratio, volume**  
1:1

**Volume resistivity,**  
25°C, Ohm-cm  
2.0 x 10<sup>14</sup>

**Color**  
Clear

**Viscosity,**  
25°C, cps  
12,000

Further information available on our web site;  
[www.epoxies.com](http://www.epoxies.com)

Tel. 800-Epoxies • Fax 877-Epoxies  
21 Starline Way • Cranston, RI 02921 • USA