

## *Comparing Zerust Film to VpCI-126 for Small Parts from Greystone*

- Background:** Patrick Ferguson of Connecticut Packaging sent in 8 small parts from Greystone. The parts will be de-rusted prior to humidity testing in Cortec VpCI-126 and Zerust film.
- Purpose:** Evaluate the corrosion protection of Zerust film, and compare it to VpCI-126, on small parts from Greystone.
- Method:** ASTM D-1748 Humidity Cabinet
- Materials:** 8 small assorted parts, provided by Greystone  
 VpCI-422  
 VpCI-414  
 VpCI-126 blue film  
 Zerust film
- Procedure:** The following procedure was used:
- 1) Eight small parts were visually inspected upon arrival.
    - a. Small amounts of corrosion were visible on all the parts.
  - 2) All parts were dipped in VpCI-422 for 15 minutes to remove existing corrosion.
  - 3) Parts were then neutralized with a 10% solution of VpCI-414.
    - a. After neutralizing, parts were hand dried.
  - 4) Parts were put into two groups of 4.
    - a. One group was packaged in the provided Zerust film, and the other was packaged into a VpCI-126 bag. Both bags were heat sealed.
  - 5) Packaged parts were then put into ASTM D-1748 humidity cabinet.
  - 6) Both packages were visually inspected periodically.
  - 7) After 168 hours, both packages were removed from ASTM D-1748 humidity cabinet.
  - 8) Parts were unpackaged, visually inspected and photographed.

**Results:** The following results were found:

Packaging	Time to Failure (Hours)
Zerust Film	<24
VpCI-126 Film	168

**Conclusion:** Almost all of the corrosion on the parts packaged in VpCI-126 was recurring from the existing corrosion that was removed prior to testing. There was considerable new corrosion on the parts packaged in the Zerust film, and considerably more corrosion than on the parts packaged in VpCI-126.



