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## *Evaluating the Tarnish Inhibition Offered by Minigrip/Zip-Pak Anti-tarnish Reclosable Bags*

**Background:** Customer submitted a Minigrip/Zip-Pak Anti-tarnish re-closable bag to Cortec Corporation. The bag is applied to precious metals for the prevention of tarnish.

**Purpose:** Evaluate the tarnish inhibiting ability of submitted Minigrip/Zip-Pak Anti-tarnish reclosable bag

**Method:** H<sub>2</sub>S Test (concentrated)

**Materials:** H<sub>2</sub>S Test Kit

**Procedure:** The above tests were performed according to standard procedures for each.

**Results:**

H<sub>2</sub>S Test (concentrated)

Material	% of tarnish on Silver Panel
Cortec VpCI-126 film (2 mil)	0
Minigrip/Zip-Pak Anti-tarnish re-closable Bag (2 mil)	20
Control	100

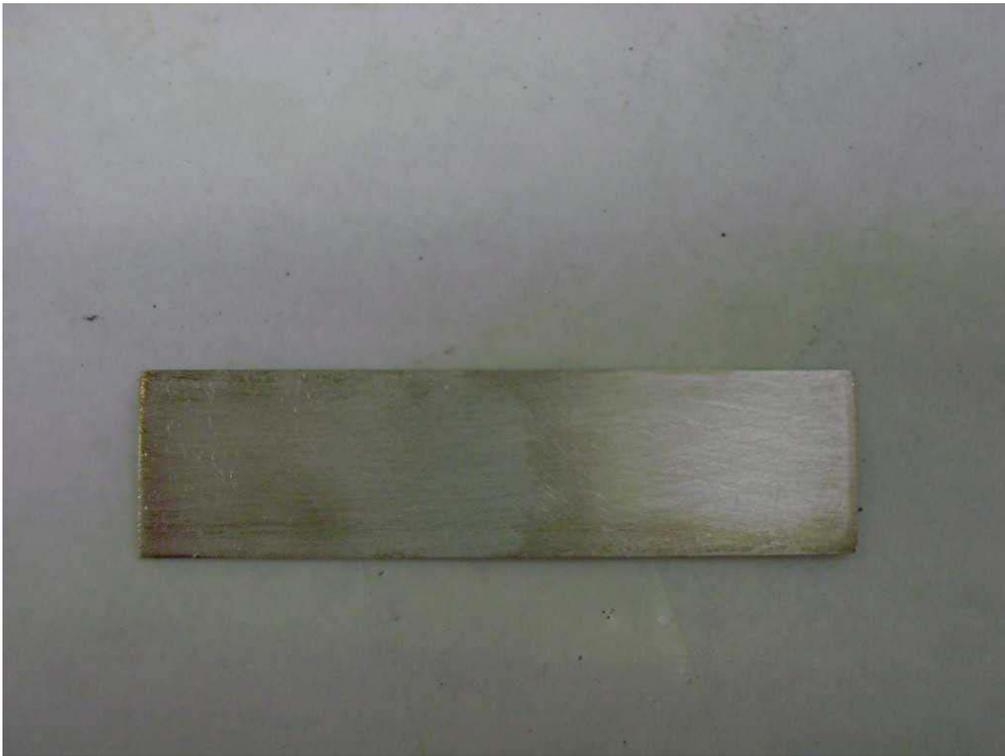
Photos enclosed

**Conclusion:** Minigrip/Zip-Pak Anti-tarnish re-closable bag provides less tarnish inhibition than Cortec VpCI-126 film. The inhibitor additive in Minigrip/Zip-Pak is most likely triazole-based compound.

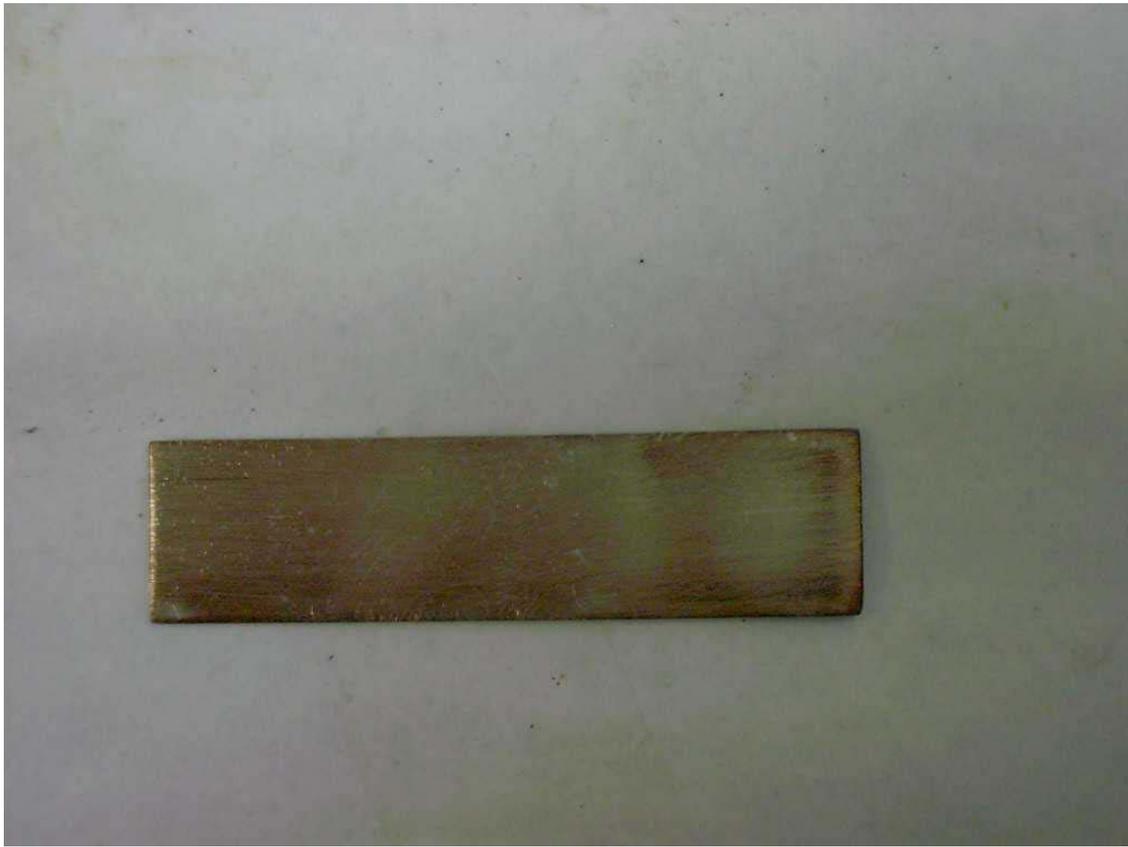




VpCI-126 Film



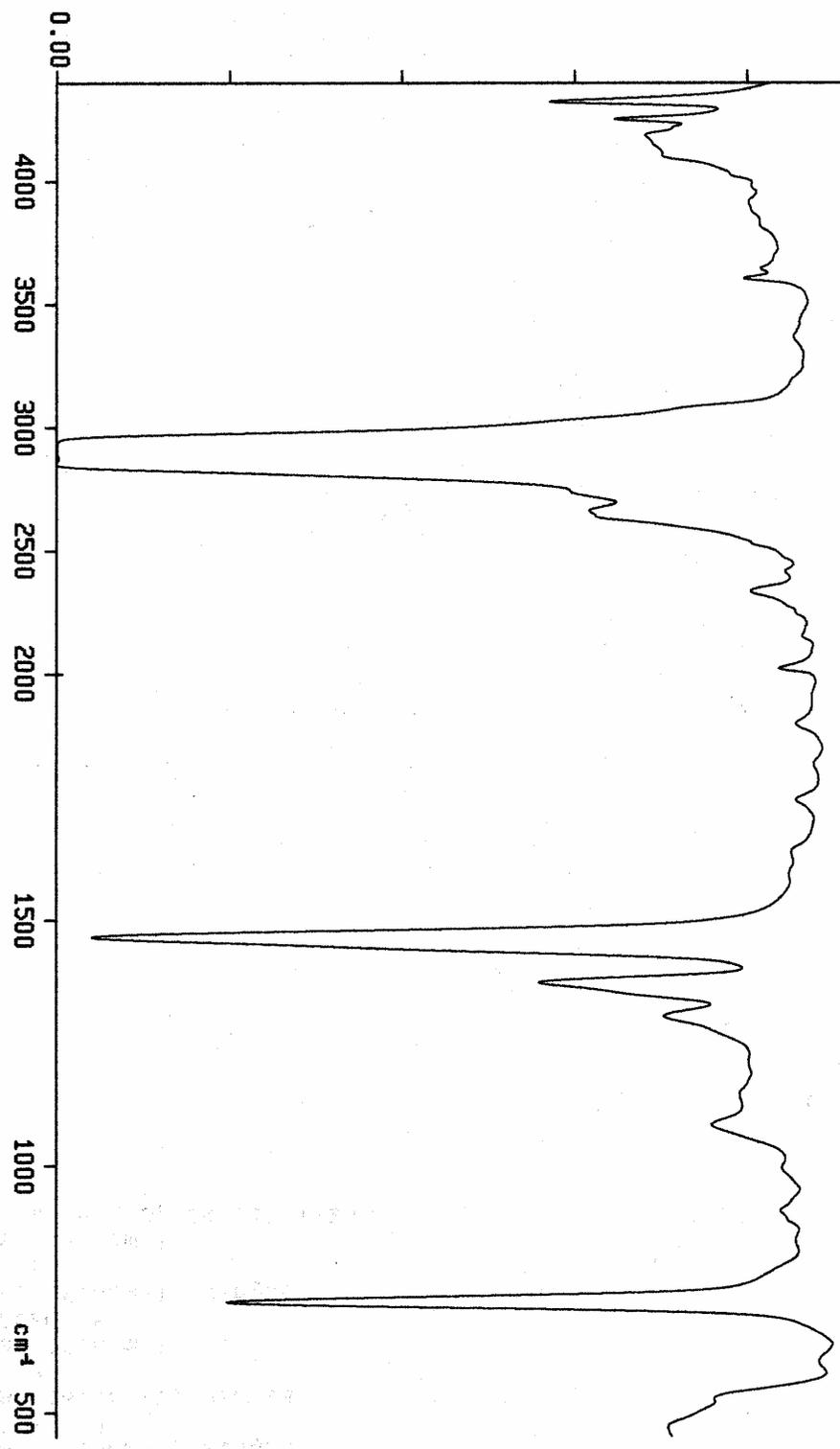
Zip-Pak



Control

PERKIN ELMER

100.00  
%T



04/08/03 10:51 QA  
X: 8 scans, 16.0cm-1  
04-106-1125, 2.5 ml  
JEWELRY BNC