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## *Evaluating Super VP 90 corrosion inhibiting pouch*

**Background:** Brian Coles/Lake Chemicals submitted "Super VP90" corrosion inhibiting pouch to Cortec Corporation. The product is produced by Napier, London. The product is advertised as a vapor phase corrosion inhibitor.

**Purpose:** Evaluate the corrosion inhibition performance of submitted film

**Method:** VIA Test  
Gas Chromatography/Mass Spectrometry  
Melting point

**Materials:** VIA Test Kit  
Melting point apparatus  
Hewlett Packard 5890A Gas Chromatograph  
Napier "Super VP 90" vapor phase corrosion inhibiting pouch  
Cor-Pak 1-MUL Pouch

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

**Results:** Melting point is 177-185°C (for melted part)

### VIA Test

Material	Panel #1	Panel #2	Panel #3
Napier "Super VP 90" vapor phase corrosion inhibiting pouch	Grade 0	Grade 0	Grade 1
Control	Fail	Fail	Fail
Cor-Pak 1-MUL Pouch*	Grade 3	Grade 3	Grade 3

\* Typical results for Cortec Cor-Pak 1-MUL pouch  
Photos and graphs enclosed

**Conclusion:** Napier "Super VP 90" vapor phase corrosion inhibiting pouch fails to provide vapor phase corrosion inhibition. Based on Melting point and GC analysis, Napier "Super VP 90" vapor phase corrosion inhibiting pouch appears to contain cyclohexylammonium benzoate and insoluble, high melting point matter which could be identified as a desiccant.

**Project #:** 04-163-1125

**Estimated Cost of Project:** 3 hours

**To:** Brian Coles/Lake Chemicals



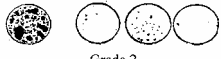
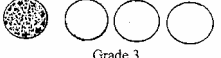
**From:** Bob Berg/Bruce Bear

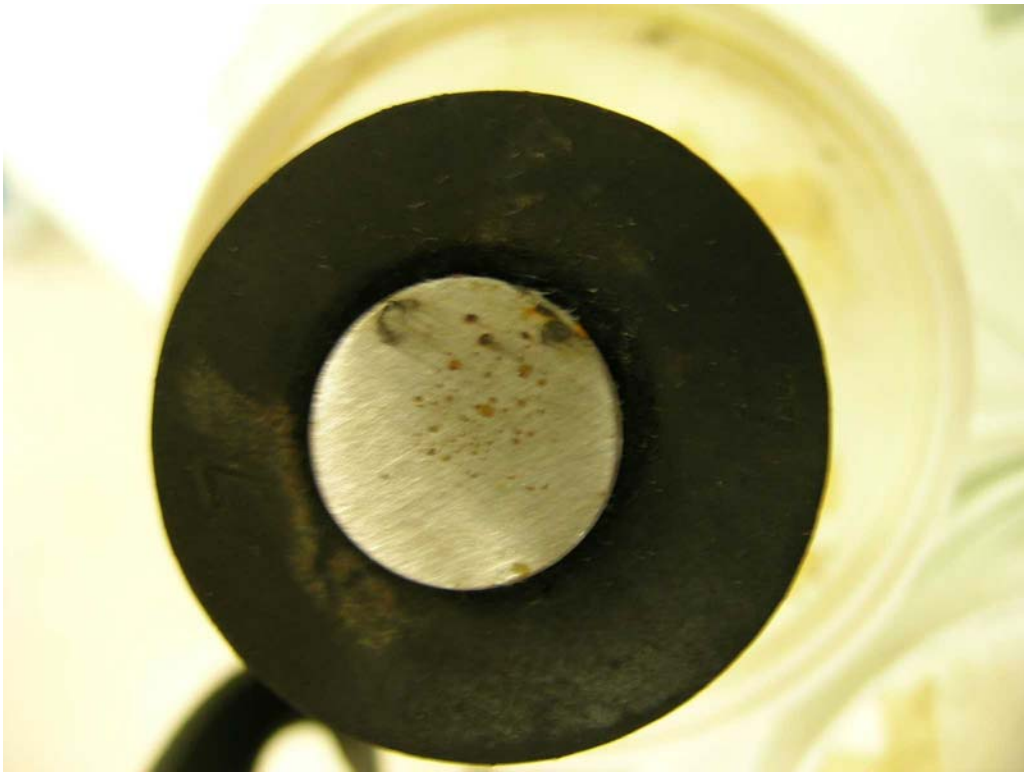
**Date:** 11/05/04



**cc:** Boris Miksic  
Anna Vignetti  
Art Ahlbrecht  
Rita Kharshan  
Cliff Cracauer  
Bob Boyle  
Cindy Johnson  
Dario Dell'Orto

**VIA Test Grades (Grade 2 or 3 are passing)**

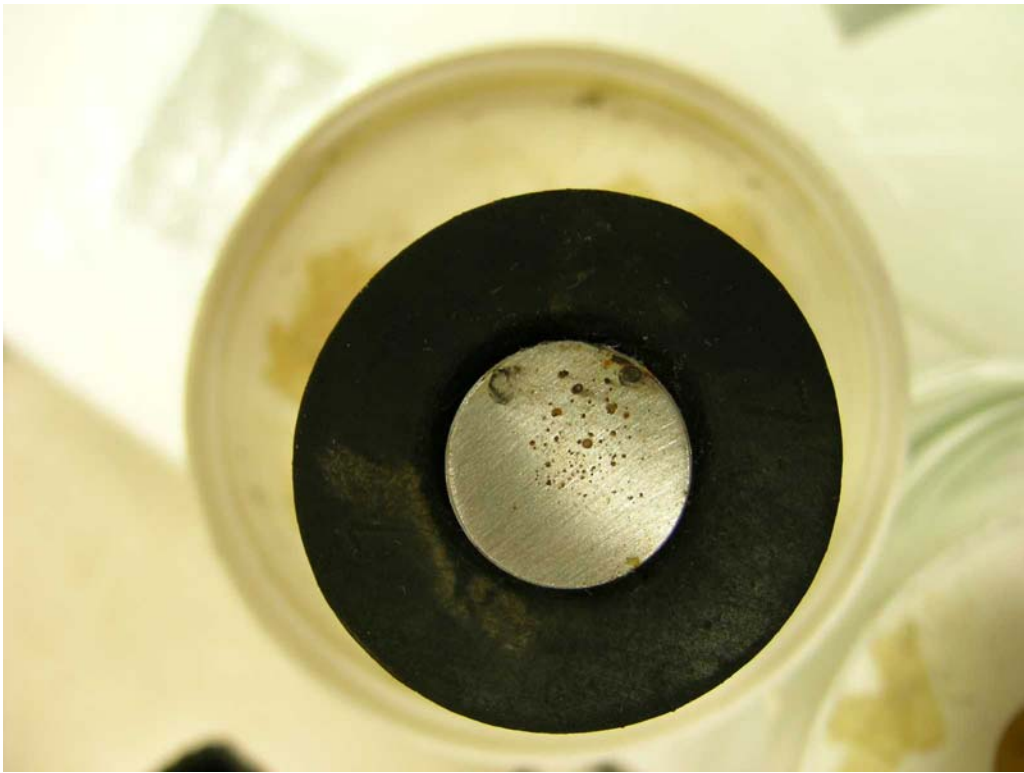
		
		Grade 0
Grade 0:	Blind test No corrosion inhibiting effect	
Grade 1:	Blind test Minute corrosion inhibiting effect	Grade 1
Grade 2:	Blind test Medium corrosion inhibiting effect	
Grade 3:	Blind test Good corrosion inhibiting effect	Grade 2
		
		Grade 3



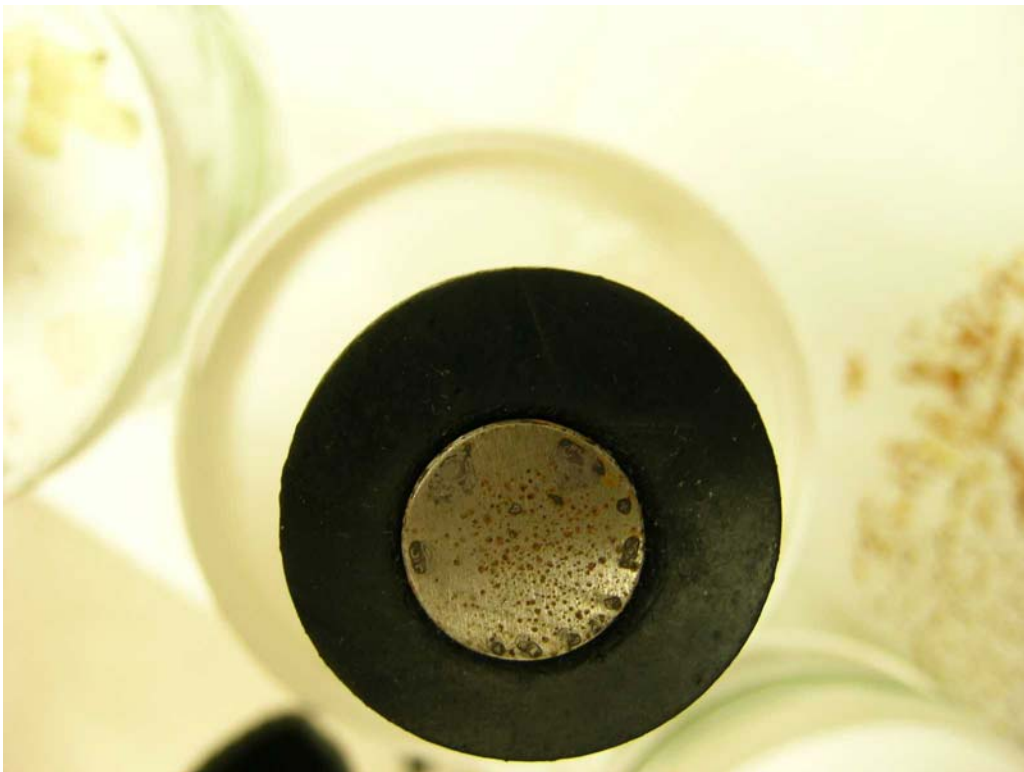
Plug #1



Plug #2



Plug #3



Control

File : C:\HPCHEM\1\DATA\110404BB.D  
Operator : Bruce  
Acquired : 4 Nov 04 15:37 using AcqMethod AMINE-D  
Instrument : GC/MS Ins  
Sample Name: 10% Super Vp90, Lake Chemicals Ch3OH extract  
Misc Info :  
Vial Number: 2

