

# Test Report No. 6391/08

## Testing of a VCI film according to MIL-PRF-22019E

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### Client

**MetPro Ltd.**  
Ballinorig Business Park,  
Tralee, Co. Kerry  
IRELAND

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### Content of the order

Samples of a VCI film were supplied to the BFSV by the client on March 27, 2008.

Description: **“MB 270 VCI Film”**

The following characteristics of the VCI film were tested according to MIL-PRF-22019E:

- Compatibility with copper
- Vapor inhibitor ability (VIA)
- Contact corrosivity
- Blocking resistance

### Summarising result

All tested characteristics of the VCI film **“MB 270 VCI Film”** fulfil the requirements of MIL-PRF-22019E.

The tables in Appendix 1 compare the results of the individual tests with the requirements of MIL-PRF-22019E.

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**Date** : April 21, 2008  
**Pages** : 2  
**Appendix** : 1  
**Official in Charge** : Dipl.-Ing. W. Reimers

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## Tests performed

The VCI film “**MB 270 VCI Film**” was tested in accordance with:

### **MIL-PRF-22019E**

„PERFORMANCE SPECIFICATION;  
BARRIER MATERIALS, TRANSPARENT, FLEXIBLE, SEALABLE, VOLATILE  
CORROSION INHIBITOR TREATED“

Edition: 23 June 2006

- Compatibility with copper  
(Test method according to MIL-PRF-22019E. 4.6.4)
- Vapor inhibitor ability (VIA)  
(Test method 4031 according to MIL-STD-3010A)
- Contact corrosivity  
(Test method 3005 according to MIL-STD-3010A; test surfaces: steel and aluminium)
- Blocking resistance  
(Test method 3003 according to MIL-STD-3010A)

Director of the Institute



Prof. K.-R. Eschke

Official in Charge





Dipl.-Ing. W. Reimers

## Test results according to MIL-PRF-22019E

### “MB 270 VCI Film”

Characteristics	Requirements	Test Results
<b>Compatibility with copper</b>	No pitting, etching, dark tarnish (classification 3), or corrosion (classification 4) of vapor exposed surface. Discount attacks within 1/16 inch of specimen.	As required
<b>Vapor inhibitor ability (VIA)</b>	No more than a total of 3 corrosion spots on 3 plugs. No corrosion spot greater than 300 microns in diameter.	As required (see below)
<b>Contact corrosivity</b> (steel and aluminium)	No corrosion, etching, or pitting	As required
<b>Blocking resistance</b>	No blocking, delamination, or rupture	As required

### Vapor Inhibitor Ability (VIA)

	Steel plugs			
	Control plug (without VCI)	Protected plugs with VCI film „MB 270 VCI Film”		
<b>Evaluation</b>				
<b>Corrosion spots</b>	Corrosion spots on the entire surface	1 spot	0 spot	1 spot

