

# Technical Data Bulletin

## #163 – 3M™ Organic Vapor Monitor 3510 (AAD 37023), with Prepaid Analysis

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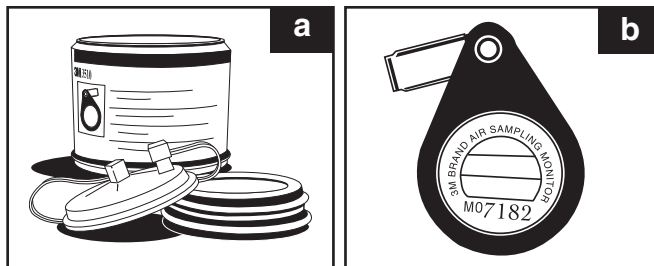
### Instructions for Use in Coating Operations

#### Step 1: Identify Solvents to be Measured

For paints or other coatings being used, examine the MSDS sheet and select the three solvents present in the highest concentration by weight percent. An example of this process is illustrated on page 3.

#### Step 2: Prepare for Air Sampling

- Remove monitor from can. Save can, instruction sheets and translucent cap.
- Record starting time on back of the monitor.



#### Step 3: Conduct Air Sampling

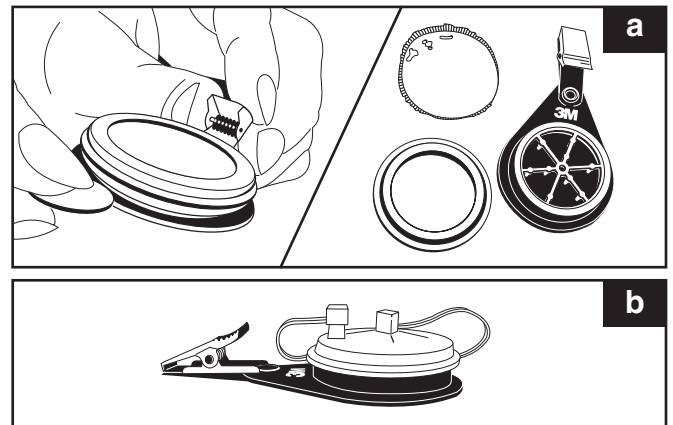
Attach monitor to collar or lapel of painter. Wear for entire day if possible. If painter leaves the shop for lunch, place monitor in a sealable plastic bag and replace it on painter when he/she returns to the shop.



#### Step 4: After Air Sampling

After sampling is complete note the ending time and record on the back of the monitor. Be sure to subtract any time the monitor was not worn by the painter.

- Snap off and discard retaining ring and white windscreen.
- Snap translucent cap onto monitor. Make sure both ports are closed.



#### Step 5: Return the Monitor for Analysis

Record all sampling information (items 1–22) on the form included with the monitor. Place the form and the monitor in the original can and return for analysis.

Mail to:  
B.I.C. — Chemistry Department  
11001 Hampshire Avenue South  
Minneapolis, MN 55438

An example of the form is shown on the next page.

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### Example of a Monitor Analysis Form

|                                       |                                |   |                                |
|---------------------------------------|--------------------------------|---|--------------------------------|
| 1. Name:                              |                                | 2. Company:                                       |                                |
| 3. Address:                           | 4. City:                       | 5. State:   | 6. Zip Code:                   |
| 7. Phone Number:                      |                                | 8. Ext.:  |                                |
| 9. FAX Number:                        |                                | 10. E-mail Address:                               |                                |
| 11. Employee Name:                    |                                | 12. Employee Number:                              |                                |
| 13. Monitor Type:<br>3510 (AAD 37023) |                                | 14. Monitor Serial No.:<br>(from back of monitor) | 15. Sampling Date:             |
| 16. Start Time:                       |                                | 17. End Time:                                     | 18. Temperature:               |
| 19. Humidity:                         | 20. Solvent 1 from MSDS Sheet: | 21. Solvent 2 from MSDS Sheet:                    | 22. Solvent 3 From MSDS Sheet: |

Note that the information in the shaded boxes must be included for the monitor to be analyzed.

### Example of a Monitor Analysis Report

|                           |   |
|---------------------------|---|
| <b>Report Number</b>      |   |
| <b>No. of Monitors</b>    | <b>Test Method Used</b><br>3M OVM Monitor |
| <b>Analysis Performed</b> | <b>Report Date</b>                        |
| <b>Analyzed By</b>        |   |

Client: XYZ Autobody Repair  
Mr. John Doe

| User Identification | Monitor Code | Sampling Date   | Sampling Time | Weight | Concentration    |
|---------------------|--------------|-----------------|---------------|--------|------------------|
|                     |              | Compounds       |               |        | Mg/m3 PPM        |
|                     | XX105        | 1/15/02         | 660 min.      |        |                  |
|                     |              | Acetone         |               | 367    | 15.2 <b>6.41</b> |
|                     |              | n-butyl acetate |               | 83.2   | 3.72 <b>0.79</b> |
|                     |              | Toluene         |               | 170    | 8.19 <b>2.18</b> |

The numbers in bold print are the concentrations (ppm) to be used in determining the respirator selection and cartridge change schedule. Consult your 3M AAD sales representative for assistance.

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## Example of Selecting Solvents to be Measured

### Material Safety Data Sheet

ACME AUTOMOTIVE FINISHES COMPANY  
1000 North Anywhere Road  
Mytown, USA

| Section I: Product Identification               |           |       |                     |                              |          |
|---|-----------|-------|---------------------|------------------------------|----------|
| Primer/topcoat/clearcoat<br>Product number XXXX |           |       |                     |                              |          |
| Section II: Hazardous Ingredients               |           |       |                     |                              |          |
|   | CAS No.   | Wt. % | Chemical Name       | Occupational Exposure Limits |          |
|   |           |       |                     | TLV                          | OSHA PEL |
|   | 108-88-3  | 1-10  | Toluene             | 50                           | 100      |
|   | 100-41-4  | 1-2   | Ethylbenzene        | 100                          | 100      |
| ✓   | 1330-20-7 | 25-40 | Xylene              | 100                          | 100      |
| ✓   | 67-64-1   | 5-10  | Acetone             | 500                          | 1000     |
| ✓   | 123-86-4  | 5-10  | n-butyl acetate     | 150                          | 150      |
|   | 78-93-3   | 1-10  | Methyl ethyl ketone | 200                          | 200      |
| Section III: Physical Data                      |           |       |                     |                              |          |

*In the example above, xylene, acetone, and n-butyl acetate would be selected as the three compounds to be measured.*

*Make sure the solvents selected are included on the compound list in the Air Monitoring Guide included with the monitor. If any solvents are not on this list, contact 3M technical service at 1-800-243-4630 for assistance.*



**Occupational Health and Environmental Safety Division**  
3M Center, Building 235-2E-91  
St. Paul, MN 55144-1000

#### For more information, please contact:

#### 3M Occupational Health and Environmental Safety Division (OH&ESD)

#### In the U.S., contact:

##### Sales Assistance

1-800-896-4223

##### Technical Assistance

1-800-243-4630

##### Fax On Demand

1-800-646-1655

##### Internet

<http://www.3M.com/occsafety>

##### For other 3M products

1-800-3M HELPS

#### In Canada, contact:

3M Canada Company, OH&ESD

P.O. Box 5757

London, Ontario N6A 4T1

##### Sales Assistance

1-800-265-1840, ext. 6137

##### Technical Assistance (Canada only)

1-800-267-4414

##### Fax On Demand

1-800-646-1655

##### Internet

<http://www.3M.com/CA/occsafety>

##### Technical Assistance In Mexico

01-800-712-0646

5270-2255, 5270-2119 (Mexico City only)

##### Technical Assistance In Brazil

0800-132333

##### Fax On Demand O.U.S. Locations

1-651-732-6530