

3M BRAND ORGANIC VAPOR MONITOR

PRODUCT NO. 3500

Qualification Data for Vinyl Chloride

SAMPLING AND ANALYSIS INFORMATION

Monitor Sampling Rate	<u>40.7 cm³/min.</u>
Recovery Coefficient	<u>0.90 in CS₂</u>
Upper Exposure Limit ⁽¹⁾	<u>168 µg (30 ppm-hours)</u>

COMPOUND PROPERTIES AND DATA

Molecular Weight	<u>62.50</u>
Published Diffusion Constant ⁽²⁾	<u>Not Available</u>
Density	<u>-</u>
T.W.A. (TLV)	<u>1.0 ppm</u>

SPECIAL CONSIDERATIONS

Sample Storage Precautions	<u>None</u>
Humidity Effects	<u>Upper Exposure Limit Substantially</u>
The Upper Exposure Limit at <u>90</u> % R.H. is	<u>5 ppm-hours</u> <u>Reduced</u>
Ceiling Level Monitoring ⁽³⁾	<u>Not Recommended</u>

CALCULATION PROCEDURE

A = mass of analyte in micrograms

B = sampling time in minutes

Substitute A & B into equations below:

$$\frac{\text{mg}}{\text{m}^3} = \frac{24.59 \times A}{\text{recovery coefficient} \times B} = \frac{27.32 \times A}{B}$$

$$\text{ppm}^{(4)} = \frac{9.62 \times A}{\text{recovery coefficient} \times B} = \frac{10.69 \times A}{B}$$

Footnotes:

- (1) This number is the highest concentration of the compound actually measured by the 3M Lab.
- (2) Diffusion constants are provided for general interest. They are not required in the calculation procedure.
- (3) A minimum sampling time of 15 minutes is required.
- (4) ppm based on 25°C. 760 mm Hg.