Instructions on the Data Files for Practice

For your convenience, we have included 20 different permeation testing data files with 12 options that are covered by the software and ASTM F2815 Standard. The data files are located under the subfolders with the same Option name.

As shown below, we have included default values (in red) for you to enter when running the software. However, you are encouraged to enter different values to see different results. If you are using your own data files, please refer to the Operating Instructions for acceptable file formats.

Option 1. Data Files 1 and 2

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Closed Loop System (CL)
Continuous Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 2. Data Files 3 and 4

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: YYYY/MM/DD HH:MM:SS
Choose System Type: Closed Loop System (CL)
Continuous Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 3. Data Files 5 and 6

Analyzer Response Format: Option 2: Use Concentration (in ppm)
Molecular weight: 58
Time Format: Time in Minutes
Choose System Type: Closed Loop System (CL)
Continuous Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 4. Data Files 7 and 8

Analyzer Response Format: Option 3: Use Other Analyzer Output Reading
Enter the equation for the calibration curve…: 16000x^2+1200x
Time Format: Time in Minutes
Choose System Type: Closed Loop System (CL)
Continuous Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 5. Data Files 9 and 10

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Open Loop System (OL)
Constant Flow Rate
Constant Flow Rate of the Fresh Collection Medium (F in ASTM F 799):
3.94 L/min
Analytical Method Detection Limit: 0.025 µg/mL **(Optional)**
Minimum detectable mass permeated: 0.025 µg/ (cm^2*min)
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 10 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 6. Data Files 11 and 12

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: MM/DD/YYYY HH:MM:SS ##
Choose System Type: Open Loop System (OL)
Constant Flow Rate
Constant Flow Rate of the Fresh Collection Medium (F in ASTM F 799):
3.94 L/min
Analytical Method Detection Limit: 0.025 µg/mL **(Optional)**
Minimum detectable mass permeated: 0.025 µg/(cm^2*min)
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 19 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 7. Data Files 13 and 14

Analyzer Response Format: Option 2: Use Concentration (in ppm)
Molecular Weight: 58
Time Format: Time in Minutes
Choose System Type: Open Loop System (OL)
Constant Flow Rate
Constant Flow Rate of the Fresh Collection Medium (F in ASTM F 799):
3.94 L/min
Analytical Method Detection Limit: 0.025 µg/mL **(Optional)**

Minimum detectable mass permeated: 0.025 µg/(cm^2*min)
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 12 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 8. Data Files 15 and 16

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Open Loop System (OL)
Variable Flow Rate
Minimum detectable mass permeated: 0.025 µg/ (cm^2*min)
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 13 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 9. Data File 17

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Closed Loop System (CL)
Discrete Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Sample Volume NOT Replaced, enter Volume Removed (Vs ASTM F 739): 0.05 **L**
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 10. Data File 18

Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Closed Loop System (CL)
Discrete Sampling
Total Volume of the Collection Medium (Vt in ASTM F 739): 5.64 L
Sample Volume IS Replaced, enter Volume Removed (Vs ASTM F 739): 0.05 **L**
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 11. Data File 19

Click "Manual Selection of Data Columns" Option
Under "Select Data Columns", Enter:
Analyzer Output: Column L
Time: Column: A

Flow Rate: Column: (entry is optional)
Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Closed Loop (CL)
Continuous Sampling
Total Volume of the Collection Medium (Vt in ADTM F 739): 5.64 L
Minimum detectable mass permeated: 0.025 µg/cm^2
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 60 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2

Option 12. Data File 20

Click "Manual Selection of Data Columns" Option
Under "Select Data Columns", Enter:
Analyzer Output: Column: A
Time: Column: D
Flow Rate: Column: B
Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Analyzer Response Format: Option 1: Use Concentration (in µg/L)
Time Format: Time in Minutes
Choose System Type: Open Loop (OL)
Variable Sampling Flowrate
Total Volume of the Collection Medium (Vt in ADTM F 739): 3.94 L
Minimum detectable mass permeated: 0.025 µg/ (cm^2*min)
Diameter: 1.00 inch
Specimen Weight: 1.00 grams
Cumulative Permeation for: 10 min (or a number shorter than Ti shown in below)
Cumulative Permeation Mass Target: 150 µg/cm^2