

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 595 mL. The mass of the volume before the experiment was 53.6591 g. After the experiment, the mass was found to be 55.7588 g. The atmospheric pressure at the time was 760.4 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 880 mL. The mass of the volume before the experiment was 46.2337 g. After the experiment, the mass was found to be 49.4461 g. The atmospheric pressure at the time was 751.8 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

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The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 501 mL. The mass of the volume before the experiment was 51.0806 g. After the experiment, the mass was found to be 52.6280 g. The atmospheric pressure at the time was 756.6 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 343 mL. The mass of the volume before the experiment was 55.7358 g. After the experiment, the mass was found to be 56.4662 g. The atmospheric pressure at the time was 762.4 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 740 mL. The mass of the volume before the experiment was 43.1854 g. After the experiment, the mass was found to be 44.6695 g. The atmospheric pressure at the time was 765.1 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 498 mL. The mass of the volume before the experiment was 49.8690 g. After the experiment, the mass was found to be 51.0464 g. The atmospheric pressure at the time was 764.2 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 586 mL. The mass of the volume before the experiment was 51.9502 g. After the experiment, the mass was found to be 54.7245 g. The atmospheric pressure at the time was 765.1 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 372 mL. The mass of the volume before the experiment was 46.8802 g. After the experiment, the mass was found to be 48.2113 g. The atmospheric pressure at the time was 750.2 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 512 mL. The mass of the volume before the experiment was 55.5674 g. After the experiment, the mass was found to be 57.8470 g. The atmospheric pressure at the time was 756.3 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

NAME: \_\_\_\_\_

The molar mass of a liquid is determined by the Dumas method. The volume of the flask used was 815 mL. The mass of the volume before the experiment was 45.4642 g. After the experiment, the mass was found to be 48.7487 g. The atmospheric pressure at the time was 750.3 torr. What is the molar mass of the liquid? (A boiling water bath was used to vaporize the liquid at 100.0°C.)

ANS: \_\_\_\_\_

Homework question 14– Dumas method

copy 111     108 g mol<sup>-1</sup>

copy 112     113 g mol<sup>-1</sup>

copy 113     95 g mol<sup>-1</sup>

copy 114     65 g mol<sup>-1</sup>

copy 115     61 g mol<sup>-1</sup>

copy 116     72 g mol<sup>-1</sup>

copy 117     144 g mol<sup>-1</sup>

copy 118     111 g mol<sup>-1</sup>

copy 119     137 g mol<sup>-1</sup>

copy 120     125 g mol<sup>-1</sup>