

# Lab Report: Gravimetric Analysis of an Unknown Sulfate

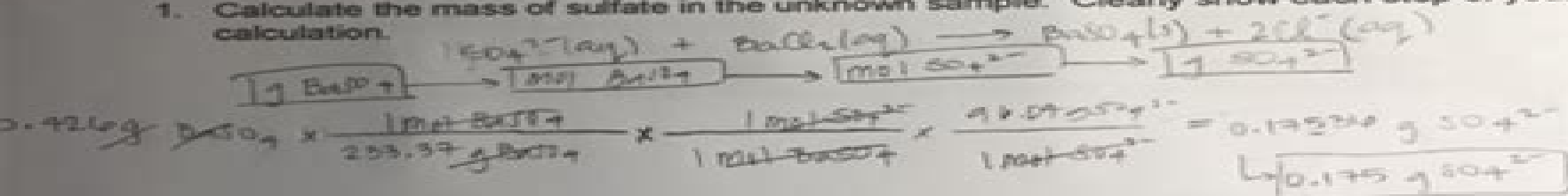
## Experimental Data

Unknown Sulfate ID Code: 20

1. Mass of empty 250-mL beaker	111.244 g
2. Mass of 250-mL beaker and unknown sulfate	112.227 g
3. Mass of unknown sulfate	0.343 g
4. Mass of empty crucible (without lid)	11.203 g
5. Mass of crucible (without lid) and barium sulfate	11.629 g
6. Mass of barium sulfate	0.426 g

## Calculations and Conclusions

- Calculate the mass of sulfate in the unknown sample. Clearly show each step of your calculation.



- Calculate the percentage by mass of sulfate in the unknown sample. Show your work.  
mass of unknown sulfate: 0.343 g ; mass of sulfate: 0.175 g  $\text{SO}_4^{2-}$

$$\% \text{ SO}_4^{2-} = \frac{0.175 \text{ g}}{0.343 \text{ g}} \times 100 = 51.0204\%$$

$$\hookrightarrow \boxed{51.0\%}$$

- Calculate the percentage by mass of the metal in the unknown sample. Show your work.

$$100.0\% - 51.0\% = 49.0\%$$

# Gravimetric Analysis Lab Report Ucsd

**Sebastian Brünink**

A red circular graphic with a gradient, appearing as a partial circle or a stylized 'C' shape, located to the right of the author's name.

## **Gravimetric Analysis Lab Report Ucsd:**

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### **Table of Contents Gravimetric Analysis Lab Report Ucsd**

1. Understanding the eBook Gravimetric Analysis Lab Report Ucsd
  - The Rise of Digital Reading Gravimetric Analysis Lab Report Ucsd
  - Advantages of eBooks Over Traditional Books
2. Identifying Gravimetric Analysis Lab Report Ucsd
  - Exploring Different Genres
  - Considering Fiction vs. Non-Fiction
  - Determining Your Reading Goals
3. Choosing the Right eBook Platform
  - Popular eBook Platforms
  - Features to Look for in an Gravimetric Analysis Lab Report Ucsd
  - User-Friendly Interface
4. Exploring eBook Recommendations from Gravimetric Analysis Lab Report Ucsd
  - Personalized Recommendations
  - Gravimetric Analysis Lab Report Ucsd User Reviews and Ratings
  - Gravimetric Analysis Lab Report Ucsd and Bestseller Lists

5. Accessing Gravimetric Analysis Lab Report Ucsd Free and Paid eBooks
  - Gravimetric Analysis Lab Report Ucsd Public Domain eBooks
  - Gravimetric Analysis Lab Report Ucsd eBook Subscription Services
  - Gravimetric Analysis Lab Report Ucsd Budget-Friendly Options
6. Navigating Gravimetric Analysis Lab Report Ucsd eBook Formats
  - ePub, PDF, MOBI, and More
  - Gravimetric Analysis Lab Report Ucsd Compatibility with Devices
  - Gravimetric Analysis Lab Report Ucsd Enhanced eBook Features
7. Enhancing Your Reading Experience
  - Adjustable Fonts and Text Sizes of Gravimetric Analysis Lab Report Ucsd
  - Highlighting and Note-Taking Gravimetric Analysis Lab Report Ucsd
  - Interactive Elements Gravimetric Analysis Lab Report Ucsd
8. Staying Engaged with Gravimetric Analysis Lab Report Ucsd
  - Joining Online Reading Communities
  - Participating in Virtual Book Clubs
  - Following Authors and Publishers Gravimetric Analysis Lab Report Ucsd
9. Balancing eBooks and Physical Books Gravimetric Analysis Lab Report Ucsd
  - Benefits of a Digital Library
  - Creating a Diverse Reading Collection Gravimetric Analysis Lab Report Ucsd
10. Overcoming Reading Challenges
  - Dealing with Digital Eye Strain
  - Minimizing Distractions
  - Managing Screen Time
11. Cultivating a Reading Routine Gravimetric Analysis Lab Report Ucsd
  - Setting Reading Goals Gravimetric Analysis Lab Report Ucsd
  - Carving Out Dedicated Reading Time
12. Sourcing Reliable Information of Gravimetric Analysis Lab Report Ucsd
  - Fact-Checking eBook Content of Gravimetric Analysis Lab Report Ucsd
  - Distinguishing Credible Sources
13. Promoting Lifelong Learning

- Utilizing eBooks for Skill Development
- Exploring Educational eBooks

### 14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

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