



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Sulphur Dioxide Gas Concentration Measurement Using Reicher Test Training

Manufacturing, Engineering and Technology / Fabrication and Extraction

Unit Standard 110413 · NQF Level 2 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the knowledge and practical skills to measure sulphur dioxide gas concentration using the Reicher test method. It covers the principles of gas concentration measurement, safety protocols, and accurate interpretation of results to ensure compliance with occupational health and safety standards.

Category	Manufacturing, Engineering and Technology
Subfield	Fabrication and Extraction
Unit Standard	110413
Accreditation	SAQA Accredited · NQF Level 2 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply the Reicher test method to measure sulphur dioxide gas concentration accurately.
- Demonstrate proper use of equipment and materials required for the Reicher test.
- Analyze test results to determine sulphur dioxide concentration levels.
- Evaluate potential hazards associated with sulphur dioxide exposure and implement safety measures.
- Interpret data in accordance with relevant occupational health and safety regulations.
- Document and report measurement results according to standard operating procedures.

WHO SHOULD ATTEND

- This training is designed for laboratory technicians, quality control personnel, and health and safety officers in industries such as mining, chemical processing, and environmental monitoring who need to measure sulphur dioxide gas concentrations.

COURSE OUTLINE

Day 1: Introduction to Sulphur Dioxide and Reicher Test Principles

- Overview of sulphur dioxide: sources, uses, and health/safety risks.
- Introduction to gas concentration measurement methods.
- The Reicher test: history, principle, and applications.
- Required reagents: iodine, starch indicator, sodium thiosulphate, etc.
- Equipment: burette, pipette, flasks, gas sampling apparatus.
- Safety protocols: PPE, ventilation, spill management.
- Pre-test preparation: sample collection and preservation.
- Demonstration of the Reicher test procedure.

Day 2: Performing the Reicher Test and Data Interpretation

- Step-by-step hands-on practice of the Reicher test.
- Calculations: titration volume, normality, and concentration formulas.
- Sources of error and how to minimise them.
- Data recording, calculation checks, and reporting.
- Quality control: blanks, duplicates, and standards.
- Regulatory standards and permissible SO₂ levels.
- Case studies: interpreting results in industrial contexts.
- Review and feedback on practical performance.

Day 3: Advanced Applications, Maintenance, and Assessment

- Adapting the Reicher test for various matrices (e.g., wine, flue gas).
- Equipment maintenance: cleaning, storage, and calibration checks.
- Troubleshooting: unexpected results, reagent degradation, and interferences.
- Data analysis: statistical tools and reporting.
- Practical assessment: perform the test independently and submit results.
- Feedback session and competency review.
- Course wrap-up and certification requirements.

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **6 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 17,900.00	R 17,900.00
1	In-House	R 23,300.00	R 23,300.00
1	On-Campus (Pretoria)	R 26,800.00	R 26,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	05 Aug 2026	On-Campus	Dubai, UAE
03 Aug 2026	05 Aug 2026	On-Campus	Johannesburg, South Africa
04 Aug 2026	06 Aug 2026	On-Campus	Pretoria, South Africa
04 Aug 2026	06 Aug 2026	On-Campus	Mauritius
05 Aug 2026	07 Aug 2026	On-Campus	Cape Town, South Africa
05 Aug 2026	07 Aug 2026	On-Campus	Lagos, Nigeria
10 Aug 2026	12 Aug 2026	On-Campus	Pretoria, South Africa
10 Aug 2026	12 Aug 2026	On-Campus	Mauritius

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 110413) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
2. **Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
3. **Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
4. **Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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