

# **NEXTChem Process Analyzers, Inc.**

## **On-Line Copper**

**Industry: Metal Plating and Semiconductor**

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Sample Filtration is eliminated, in samples with high solids. For samples requiring dilution  $\leq 2$ mm particles can easily be handled. For non-dilution samples  $\leq 6$ mm particles pose no problem. No other system can match this rugged design.

NEXTChem Analyzers can provide accuracy only matched by the most precise laboratory equipment. Our reagent precision pumps deliver titrants with  $\pm 0.001$  mL reproducibility. Potentiometric analyses are utilized thus eliminating errors caused by electrode drift.



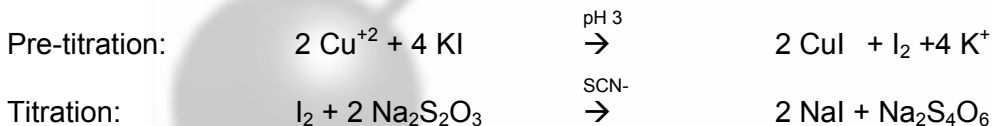
### **Analysis of Copper**

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Copper is determined by an iodometric titration. The endpoint is found with a platinum redox electrode.

#### **Reactions:**

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#### **Reagents:**

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0.2 N sodium thiosulfate, 1 M potassium iodide w/ 0.1 M potassium thiocyanate, 2 N sulfuric acid, 1 M ammonium hydroxide (cleaning solution)

#### **Sensor:**

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Platinum Redox Electrode

#### **Detection Limits / Interferences:**

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Dilution: 126,000 - 25 ppm  
Non-Dilution: 500 – 0 ppm (lower detection limit 2 ppm)  
Interferences: Other Redox Agents

nextchem@nextchem-analyzers.com  
1900 North Austin Ave., Suite 101 Chicago, IL 60639 USA  
Office Phone +773-637-NEXT(6398) Office Fax +773-637-7260