



## Product Specification

**Chemical Name:** Osmium(VIII) oxide (standard ~2% aqueous solution)  
**CMI Product Code:** 4015-2S  
**CAS Number:** 20816-12-0  
**Formula:** OsO<sub>4</sub> in H<sub>2</sub>O  
**Formula Weight:** 254.196 g/mol for OsO<sub>4</sub>  
**Theoretical Os%:** ~1.5% Os in solution

### PARAMETER

### SPECIFICATION

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|                   |  |
|-------------------|--|
| <b>Os Assay</b>   | 1.5 ± 0.1%   |
| <b>Purity</b>     | 99.9% minimum (99.95% Os basis)                          |
| <b>Appearance</b> | Pale Yellow Liquid                                       |
| <b>Storage</b>    | Store in a tightly closed container in a cool, dry place |

### Properties of Starting OsO<sub>4</sub>

|                               |  |
|-------------------------------|--|
| <b>Os Assay</b>               | 74.8 ± 0.6%  |
| <b>Purity</b>                 | 99.9% minimum (99.95% Os basis)  |
| <b>Trace Metal Impurities</b> | < 500 ppm  |
| <b>Melting Point</b>          | 41.0 - 41.5°C  |
| <b>USPS Tests</b>             | Solubility – Passes Tests<br>Non-Volatile Matter – Passes Tests (<0.2%)<br>Heavy Metals – Passes Tests (<0.005%) |

**Reviewing Chemist:** Tyler Bazzoli, Lead Chemist: TB

**Specification Approval:** Dr. Ernest Addo, Ph.D., Director of Quality & Analytical Testing: EA

**Specification Revision Date:** October 20<sup>th</sup>, 2015

**Revision Level:** 0

Colonial Metals warrants, that at the time of product release this product conformed to the information contained on this specification sheet. Purchaser must determine the suitability of the product for its particular use.