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InS_x Calibration Standards for Sulfur

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Micromatter recently introduced InS_x, indium sulphide, to replace CuS_x, copper sulfide, for the quantification of sulfur. This change was made to improve the quality of our sulfur standards and to render the manufacturing process more consistent. While both CuS_x and InS_x can be used for sulfur calibrations, InS_x standards have some benefits over CuS_x.

1. InS_x is manufactured using a one-step vacuum deposition technique, similar to other Micromatter calibration standards, whereas CuS_x was typically manufactured by exposing a fresh coating of copper to ammonium sulfide vapour, which sometimes led to slightly non-uniform deposits. The vacuum deposition of InS_x ensures excellent uniformity of the coating on the filter.
2. Unlike CuS_x, the 99.99% pure In₂S₃ starting material used for the evaporation is not exposed to moisture or chemicals, therefore eliminating any chances of contamination.
3. InS_x thin films are stable and are not expected to decompose over time if stored and used in accordance with Micromatter's recommendations.

Micromatter strives to continuously improve the products we offer to our customers, and we hope that the novel calibration materials described here will meet with our customers' approval. Please do not hesitate to contact us if you have any questions or concerns. Thank you.