

August 7, 2026

Dear NMIJ CRM 4220-a Users,

**Revision of the Certified Value for NMIJ CRM 4220-a
Potassium Perfluorooctanesulfonate in Methanol**

We hope this letter finds you well.

Concerns were raised regarding the validity of the certified values and uncertainties for NMIJ CRM 4220-a "Potassium Perfluorooctanesulfonate Standard Solution (Methanol Solution)."

Subsequent investigations of both the raw material and the CRM revealed the presence of related impurities in the raw material that had not been sufficiently evaluated during the development of the CRM. After reassessing the purity of the raw material and the certified value while taking these related impurities into account, we concluded that revision of the certified value was necessary.

Accordingly, the certified value of NMIJ CRM 4220-a has been revised as shown in the attached Appendix.

We sincerely apologize for any concern or inconvenience this matter may have caused. We also apologize for the time required to complete the re-evaluation and revision of the certificate in order to ensure the reliability of the certified value.

Should you have any questions or concerns regarding this revision of the certified value, please contact us at the address provided below.

We are committed to preventing the recurrence of similar situations and to further enhancing the quality and reliability of NMIJ Certified Reference Materials. We appreciate your understanding and continued support.

Yours sincerely,

Megumi AKOSHIMA

Director

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Appendix

Revision of the Certified Value for NMIJ CRM 4220-a Potassium Perfluorooctanesulfonate in Methanol

Reason for the Revision

Additional investigations of NMIJ CRM 4220-a revealed the presence of related impurities in the raw material that had not been sufficiently evaluated during the development of the CRM. Reassessment of the raw material purity and the certified value, taking these related impurities into account, demonstrated that revision of the certified value was necessary.

Furthermore, the related impurities identified in this investigation were determined to originate from the raw material rather than having formed during storage. In addition, no significant change in the concentration of the principal component has been observed during the storage period. Therefore, this revision of the certified value is not attributable to degradation or instability of the standard solution.

Previous Certified Value

Substance	Certified value, Mass fraction (mg/kg)	Expanded uncertainty, Mass fraction (mg/kg)
Potassium perfluorooctanesulfonate (linear isomer) (Potassium heptadecafluoro-1-octanesulfonate)	9.93	0.15

Revised Certified Value

Substance	Certified value, Mass fraction (mg/kg)	Expanded uncertainty, Mass fraction (mg/kg)
Potassium perfluorooctanesulfonate (linear isomer) (Potassium heptadecafluoro-1-octanesulfonate)	9.70	0.15