

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Source data for Figures 3-5 and S6a

Figure 3. This table records the ^{27}Al MAS NMR intensity (arb. units, columns B - D) against the chemical shift in ppm (column A). The Larmor frequency is shown in A2 in MHz. The time at which the precipitates were collected/filtered is in B2 through D2, in days for B2 and C2 and in months for D2.

Figure 4. This table records the ^{27}Al MAS NMR intensity (arb. units, columns B - D) against the chemical shift in ppm (column A). The Larmor frequency is shown in A2 in MHz. The corresponding sample identities are annotated in B2 - D2.

Figure 5. This table records the ^{27}Al 3QMAS NMR internal horizontal projections' intensity (arb. units, columns B, D, and F) against the corresponding chemical shift in ppm (columns A, C and D). The corresponding sample identities are annotated in A2 - D2. This table also records the ^{27}Al 3QMAS NMR internal vertical projections' intensity (arb. units, columns H, J and L) against the corresponding chemical shift in ppm (columns G, I and K). The corresponding sample identities are annotated in G2 - K2.

Figure S6a. This table records the ^{27}Al MAS NMR intensity (arb. units, columns B - R) against the chemical shift in ppm (column A). The Larmor frequency is shown in A2 in MHz. The time at which the spectra were acquired is in B2-R2, in hours.