Supporting Information for:

**Na$_2$Te$_3$Mo$_3$O$_{16}$: A New Molybdenum Tellurite with Second-Harmonic Generating and Pyroelectric Properties**

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S1. Calculated and observed powder X-ray diffraction pattern for Na$_2$Te$_3$Mo$_3$O$_{16}$
S2. Thermogravimetric analysis data for Na$_2$Te$_3$Mo$_3$O$_{16}$
S3. Pyroelectric data for Na$_2$Te$_3$Mo$_3$O$_{16}$
S4. Ferroelectric data for Na$_2$Te$_3$Mo$_3$O$_{16}$
S5. Phase-matching curve and variable temperature SHG data for Na$_2$Te$_3$Mo$_3$O$_{16}$
S1. Calculated and observed powder X-ray diffraction pattern for $\text{Na}_2\text{Te}_3\text{Mo}_3\text{O}_{16}$
S2. Thermogravimetric analysis diagram for Na₂Te₃Mo₃O₁₆
S3. Pyroelectric data for Na$_2$Te$_3$Mo$_3$O$_{16}$

![Graph showing pyroelectric data for Na$_2$Te$_3$Mo$_3$O$_{16}$. The graph plots $P$ (µC/cm$^2$) vs. $T$ (°C) with data points and a fitted curve. The table provides the data and parameters for the fit.

- **Data**: Data1_B
- **Model**: ExpDec1
- **Equation**: $y = A1 \cdot \exp(-x/t1) + y0$
- **Chi$^2$/DoF**: $1.4629 \times 10^{-7}$
- **R$^2$**: 0.98511
- **y0**: $0.17933 \pm 0.00017$
- **A1**: $0.02857 \pm 0.00257$
- **t1**: $33.91555 \pm 0.55096$
S4. Ferroelectric data for Na$_2$Te$_3$Mo$_3$O$_{16}$. Note that the ‘gap’ in the curve is attributable to dielectric losses and not ferroelectric hysteresis.
S4. Phase-matching curve and variable temperature SHG data for Na$_2$Te$_3$Mo$_3$O$_{16}$