

Diffuse streaks in a single crystal X-ray diffraction photograph of humite from Sri Lanka

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The crystal structures of the humite group minerals ($n\text{Mg}_2\text{SiO}_4 \cdot \text{Mg}(\text{OH},\text{F})_2$) are described as stacking of brucite layers($\text{Mg}(\text{OH},\text{F})_2$) and olivine layers(Mg_2SiO_4) parallel to (001). Humite group minerals from Kuch Lai, Russia, Tilley Foster mine, U.S.A., Sterling Hill, U.S.A., Sri Lanka were studied using a single crystal oscillation camera with imaging plate and rotating anode X-ray generator. Single crystal X-ray diffraction photographs of humite($n=3$) from Sri Lanka Showed the coexistence of spots of humite and chondrodite and diffuse streaks parallel to c^* , indicating the existence of stacking disorder.