Electron paramagnetic resonance (EPR) studies of Mn$^{2+}$ impurity in single crystals of diammonium hexaaqua magnesium(II) sulfate have been carried out at 9.3 GHz (X-band) at room temperature. The EPR spectra exhibit a group of five fine structure transitions. The spin-Hamiltonian parameters were determined. Mn$^{2+}$ enters the lattice interstitially. The EPR spectrum of a powder sample supports the data obtained by single crystal studies. – PACS number: 76.30

Key words: Electron Paramagnetic Resonance; Spin-Hamiltonian; Fine Structure.