$$h\, a_{13}\, \xi_3\, f_1[0, 0, x_3] + 2\, h^2\, a_{11}\, a_{13}\, \xi_3\, f_1[0, 0, x_3] +$$
$$3\, h^3\, a_{11}^2\, a_{13}\, \xi_3\, f_1[0, 0, x_3] + 2\, h^3\, a_{12}\, a_{13}\, a_{21}\, \xi_3\, f_1[0, 0, x_3] +$$
$$h^2\, a_{13}\, a_{22}\, \xi_3\, f_1[0, 0, x_3] + \ll\!337\!\gg +$$
$$\frac{1}{6}\, h^3\, a_{31}^3\, x_3^3\, \xi_3\, f_3{}^{(3,0,0)}[0, 0, x_3] + \frac{1}{2}\, h^3\, a_{31}^2\, a_{32}\, x_3^3\, f_1{}^{(3,1,0)}[0, 0, x_3] +$$
$$\frac{1}{6}\, h^3\, a_{31}^3\, x_3^3\, f_2{}^{(3,1,0)}[0, 0, x_3] + \frac{1}{6}\, h^3\, a_{31}^3\, x_3^3\, f_1{}^{(4,0,0)}[0, 0, x_3]$$