$$a_2 = \frac{\frac{D_{\Omega yz}}{\sqrt{D_{\Omega yy}D_{\Omega zz}}} - \frac{D_{\Omega xz}}{\sqrt{D_{\Omega xx}D_{\Omega zz}}} \frac{D_{\Omega xy}}{\sqrt{D_{\Omega xx}D_{\Omega yy}}}}{\sqrt{1 - \frac{D_{\Omega xy}^2}{D_{\Omega xx}D_{\Omega yy}}}}$$