$$KCD(h) = \frac{\arccos\left(\frac{\boldsymbol{\alpha}_p^T K_{p,f} \boldsymbol{\alpha}_f}{\sqrt{\boldsymbol{\alpha}_p^T K_{p,p} \boldsymbol{\alpha}_p} \sqrt{\boldsymbol{\alpha}_f^T K_{f,f} \boldsymbol{\alpha}_f}}\right)}{\arccos\left(\frac{\rho_p}{\sqrt{\boldsymbol{\alpha}_p^T K_{p,p} \boldsymbol{\alpha}_p}}\right) + \arccos\left(\frac{\rho_f}{\sqrt{\boldsymbol{\alpha}_f^T K_{f,f} \boldsymbol{\alpha}_f}}\right)}$$