

	$\Delta_{1^+a\beta}^{\#1}$	$\Delta_{1^+a\beta}^{\#2}$	$\Delta_{1^+a\beta}^{\#3}$	$\Delta_{1^+a}^{\#1}$	$\Delta_{1^+a}^{\#2}$	$\Delta_{1^+a}^{\#3}$	$\Delta_{1^+a}^{\#5}$	$\Delta_{1^+a}^{\#6}$	$\mathcal{T}_{1^+a}^{\#1}$	
$\Delta_{1^+}^{\#1} \uparrow^{a\beta}$	$\frac{4}{3} (-\frac{1}{a_0+4a_1-4a_2} + \frac{2a_1+a_2-2a_5-6a_7+2a_9}{2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9)})$	$\frac{2}{3} \sqrt{2} (-\frac{1}{a_0+4a_1-4a_2} - \frac{2(2a_1+a_2-2a_5-6a_7+2a_9)}{2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9)})$	$-\frac{4(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0	0	0	0	0	0	
$\Delta_{1^+}^{\#2} \uparrow^{a\beta}$	$\frac{2}{3} \sqrt{2} (-\frac{1}{a_0+4a_1-4a_2} - \frac{2(2a_1+a_2-2a_5-6a_7+2a_9)}{2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9)})$	$-\frac{2}{3(a_0+4a_1-4a_2)} + \frac{8(2a_1+a_2-2a_5-6a_7+2a_9)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$\frac{4\sqrt{2}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0	0	0	0	0	0	
$\Delta_{1^+}^{\#3} \uparrow^{a\beta}$	$-\frac{4(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{4\sqrt{2}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{4(a_0-2a_1-a_2)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0	0	0	0	0	0	
$\Delta_{1^+}^{\#1} \uparrow^a$	0	0	0	$\frac{4(2a_1+a_2-2a_5-6a_7+2a_9)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$\frac{4\sqrt{2}(2a_1+a_2-2a_5-6a_7+2a_9)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0	0	$-\frac{4\sqrt{\frac{2}{3}}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$\frac{4(2a_1+a_2+ag)}{3\sqrt{3}(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0
$\Delta_{1^+}^{\#2} \uparrow^a$	0	0	0	$\frac{4\sqrt{2}(2a_1+a_2-2a_5-6a_7+2a_9)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$\frac{8(2a_1+a_2-2a_5-6a_7+2a_9)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0	0	$-\frac{8(2a_1+a_2+ag)}{3\sqrt{3}(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{4\sqrt{\frac{2}{3}}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	0
$\Delta_{1^+}^{\#3} \uparrow^a$	0	0	0	0	0	0	$-\frac{10}{9(a_0+2a_5-6a_7)} - \frac{1}{6(3a_0-2(a_5-8a_6+5a_7-4c_{13}k^2))}$	$-\frac{1}{\sqrt{2}(9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2))}$	$-\frac{1}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	0
$\Delta_{1^+}^{\#4} \uparrow^a$	0	0	0	0	0	0	$\frac{1}{18} \sqrt{5} (\frac{4}{a_0+2a_5-6a_7} - \frac{3}{3a_0-2(a_5-8a_6+5a_7-4c_{13}k^2)})^2$	$-\frac{\sqrt{\frac{5}{2}}}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$-\frac{\sqrt{5}}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	0
$\Delta_{1^+}^{\#5} \uparrow^a$	0	0	0	$-\frac{4\sqrt{\frac{2}{3}}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{8(2a_1+a_2+ag)}{3\sqrt{3}(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{1}{\sqrt{2}(9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2))}$	$-\frac{\sqrt{\frac{5}{2}}}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$-\frac{8(-a_0+2a_1+a_2)}{9(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))} - \frac{1}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$(\sqrt{2}(12a_0^2-3a_9^2-a_0(30a_1+15a_2+2a_5-64a_6+22a_7+6a_9-32c_{13}k^2))+2(2a_1+a_2)(a_5-32a_6+11a_7-16c_{13}k^2)))/(9(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))(3a_0-2(a_5-8a_6+5a_7-4c_{13}k^2)))$	0
$\Delta_{1^+}^{\#6} \uparrow^a$	0	0	0	$\frac{4(2a_1+a_2+ag)}{3\sqrt{3}(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$\frac{4\sqrt{\frac{2}{3}}(2a_1+a_2+ag)}{3(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))}$	$-\frac{1}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$-\frac{\sqrt{5}}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$-\frac{-4a_0+8a_1+4a_2}{9(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))} - \frac{2}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	$-\frac{-4a_0+8a_1+4a_2}{9(2(2a_1+a_2)(a_5+3a_7)+a_9^2+a_0(2a_1+a_2-2a_5-6a_7+2a_9))} - \frac{2}{9a_0-6(a_5-8a_6+5a_7-4c_{13}k^2)}$	0
$\mathcal{T}_{1^+}^{\#1} \uparrow^a$	0	0	0	0	0	0	0	0	0	0

	$\Gamma_{1^+a\beta}^{\#1}$	$\Gamma_{1^+a\beta}^{\#2}$	$\Gamma_{1^+a\beta}^{\#3}$	$\Gamma_{1^+a}^{\#1}$	$\Gamma_{1^+a}^{\#2}$	$\Gamma_{1^+a}^{\#3}$	$\Gamma_{1^+a}^{\#4}$	$\Gamma_{1^+a}^{\#5}$	$\Gamma_{1^+a}^{\#6}$	$h_{1^+a}^{\#1}$
$\Gamma_{1^+}^{\#1} \uparrow^{a\beta}$	$\frac{1}{4} (-a_0-6a_1+5a_2)$	$-\frac{a_0+2a_1-3a_2}{2\sqrt{2}}$	$\frac{1}{4} (-2a_1-a_2-a_9)$	0	0	0	0	0	0	0
$\Gamma_{1^+}^{\#2} \uparrow^{a\beta}$	$-\frac{a_0+2a_1-3a_2}{2\sqrt{2}}$	$\frac{1}{2} (-2a_1+a_2)$	$\frac{2a_1+a_2+ag}{2\sqrt{2}}$	0	0	0	0	0	0	0
$\Gamma_{1^+}^{\#3} \uparrow^{a\beta}$	$\frac{1}{4} (-2a_1-a_2-a_9)$	$\frac{2a_1+a_2+ag}{2\sqrt{2}}$	$-\frac{3}{4} (2a_1+a_2-2a_5-6a_7+2a_9)$	0	0	0	0	0	0	0
$\Gamma_{1^+}^{\#1} \uparrow^a$	0	0	0	$\frac{1}{12} (a_0-2a_1-a_2)$	$\frac{a_0-2a_1-a_2}{6\sqrt{2}}$	0	0	$-\frac{2a_1+a_2+ag}{2\sqrt{6}}$	$\frac{2a_1+a_2+ag}{4\sqrt{3}}$	0
$\Gamma_{1^+}^{\#2} \uparrow^a$	0	0	0	$\frac{a_0-2a_1-a_2}{6\sqrt{2}}$	$\frac{1}{6} (a_0-2a_1-a_2)$	0	0	$-\frac{2a_1+a_2+ag}{2\sqrt{3}}$	$\frac{2a_1+a_2+ag}{2\sqrt{6}}$	0
$\Gamma_{1^+}^{\#3} \uparrow^a$	0	0	0	0	0	$\frac{1}{12} (-9a_0-14a_5-8a_6+50a_7-4c_{13}k^2)$	$\frac{1}{3} \sqrt{5} (a_5-2a_6-a_7-c_{13}k^2)$	$\frac{-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2)}{12\sqrt{2}}$	$-\frac{a_0}{4} + \frac{1}{6} (a_5-8a_6+5a_7-4c_{13}k^2)$	0
$\Gamma_{1^+}^{\#4} \uparrow^a$	0	0	0	0	0	$\frac{1}{3} \sqrt{5} (a_5-2a_6-a_7-c_{13}k^2)$	$\frac{1}{12} \sqrt{\frac{5}{2}} (-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2))$	$\frac{1}{12} \sqrt{5} (-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2))$	$\frac{1}{12} \sqrt{5} (-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2))$	0
$\Gamma_{1^+}^{\#5} \uparrow^a$	0	0	0	$-\frac{2a_1+a_2+ag}{2\sqrt{6}}$	$-\frac{2a_1+a_2+ag}{2\sqrt{3}}$	$-\frac{3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2)}{12\sqrt{2}}$	$\frac{1}{12} \sqrt{\frac{5}{2}} (-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2))$	$\frac{1}{12} (-3a_0-2(6a_1+3a_2-7a_5+8a_6-23a_7+6a_9+4c_{13}k^2))$	$\frac{3a_0-6a_1-3a_2+4a_5+16a_6+8a_7-6a_9+8c_{13}k^2}{6\sqrt{2}}$	0
$\Gamma_{1^+}^{\#6} \uparrow^a$	0	0	0	$\frac{2a_1+a_2+ag}{4\sqrt{3}}$	$\frac{2a_1+a_2+ag}{2\sqrt{6}}$	$-\frac{a_0}{4} + \frac{1}{6} (a_5-8a_6+5a_7-4c_{13}k^2)$	$\frac{1}{12} \sqrt{5} (-3a_0+2(a_5-8a_6+5a_7-4c_{13}k^2))$	$\frac{1}{12} (-6a_0-6a_1-3a_2+10a_5-32a_6+38a_7-6a_9-16c_{13}k^2)$	$\frac{1}{12}$	0
$h_{1^+}^{\#1} \uparrow^a$	0	0	0	0	0	0	0	0	0	0

Lagrangian density

$$-\frac{1}{3}a_0\Gamma_{\alpha\mu}^{\mu}\Gamma_{\beta}^{\alpha\beta}+\frac{1}{3}a_1\Gamma_{\alpha\mu}^{\mu}\Gamma_{\beta}^{\alpha\beta}+\frac{1}{6}a_2\Gamma_{\alpha\mu}^{\mu}\Gamma_{\beta}^{\alpha\beta}-$$

$$2a_6\Gamma_{\alpha\beta\mu}^{\mu}\Gamma_{\beta}^{\alpha\beta}+\frac{1}{3}a_9\Gamma_{\alpha\mu}^{\mu}\Gamma_{\beta}^{\alpha\beta}-\frac{1}{8}a_0\Gamma_{\alpha\beta\mu}\Gamma^{\alpha\beta\mu}-a_1\Gamma_{\alpha\beta\mu}\Gamma^{\alpha\beta\mu}+$$

$$\frac{1}{4}a_5\Gamma_{\alpha\beta\mu}\Gamma^{\alpha\beta\mu}+\frac{9}{4}a_7\Gamma_{\alpha\beta\mu}\Gamma^{\alpha\beta\mu}-\frac{1}{2}a_9\Gamma_{\alpha\beta\mu}\Gamma^{\alpha\beta\mu}-\frac{1}{8}a_0\Gamma_{\alpha\mu\beta}\Gamma^{\alpha\beta\mu}-$$

$$\frac{1}{2}a_2\Gamma_{\alpha\mu\beta}\Gamma^{\alpha\beta\mu}+\frac{1}{4}a_5\Gamma_{\alpha\mu\beta}\Gamma^{\alpha\beta\mu}+\frac{9}{4}a_7\Gamma_{\alpha\mu\beta}\Gamma^{\alpha\beta\mu}-\frac{1}{2}a_9\Gamma_{\alpha\mu\beta}\Gamma^{\alpha\beta\mu}-$$

$$\frac{1}{2}a_2\Gamma^{\alpha\beta\mu}\Gamma_{\beta\alpha\mu}-\frac{1}{2}a_5\Gamma^{\alpha\beta\mu}\Gamma_{\beta\alpha\mu}-\frac{1}{2}a_0\Gamma^{\alpha\beta\mu}\Gamma_{\beta\mu\alpha}+a_2\Gamma^{\alpha\beta\mu}\Gamma_{\beta\mu\alpha}-$$

$$a_5\Gamma^{\alpha\beta\mu}\Gamma_{\beta\mu\alpha}+\frac{1}{2}a_9\Gamma^{\alpha\beta\mu}\Gamma_{\beta\mu\alpha}+\frac{1}{12}a_0\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}-\frac{2}{3}a_1\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}-$$

$$\frac{1}{3}a_2\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+\frac{1}{2}a_5\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+\frac{1}{2}a_7\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}-\frac{1}{2}a_9\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+$$

$$+\frac{1}{12}a_0\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+\frac{1}{2}a_5\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+\frac{1}{2}a_7\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}-\frac{1}{6}a_9\Gamma^{\alpha\beta}\Gamma_{\beta}^{\mu\mu}+$$

$$+a_1\Gamma^{\alpha\beta\mu}\Gamma_{\mu\beta\alpha}-\frac{1}{2}a_5\Gamma^{\alpha\beta\mu}\Gamma_{\mu\beta\alpha}+\frac{1}{2}a_9\Gamma^{\alpha\beta\mu}\Gamma_{\mu\beta\alpha}+\frac{1}{6}a_0\Gamma^{\alpha\beta}\Gamma_{\beta\mu}^{\mu\mu}-$$

$$\frac{1}{6}a_2\Gamma^{\alpha\beta}\Gamma_{\mu\mu}^{\mu\mu}-\frac{1}{2}a_9\Gamma^{\alpha\beta}\Gamma_{\mu\mu}^{\mu\mu}-\frac{1}{2}a_7\Gamma^{\alpha\beta}\Gamma_{\mu\mu}^{\mu\mu}+\frac{1}{3}a_1\Gamma^{\alpha\beta}\Gamma_{\mu\mu}^{\mu\mu}-$$

$$\frac{1}{4}a_0\Gamma^{\alpha\beta}\Gamma_{\alpha}\partial_{\beta}h_{\mu}^{\mu}+\frac{1}{4}a_0\Gamma^{\alpha\beta}\Gamma_{\mu}\partial_{\beta}h_{\mu}^{\mu}-\frac{1}{4}a_0h_{\mu}^{\mu}\partial_{\beta}\Gamma_{\alpha}^{\alpha\beta}+$$

$$+\frac{1}{4}a_0h_{\mu}^{\mu}\partial_{\beta}\Gamma_{\mu}^{\alpha\beta}-\frac{1}{2}a_0h_{\alpha\beta}\partial_{\beta}\Gamma^{\alpha\beta\mu}+\frac{1}{2}a_0h^{\alpha\beta}\partial_{\beta}\partial_{\alpha}h_{\mu}^{\mu}-$$

$$-\frac{1}{8}a_0\partial_{\beta}h_{\mu}^{\mu}\partial^{\beta}h_{\alpha}^{\alpha}+\frac{1}{2}a_0\Gamma_{\alpha}^{\alpha}\partial_{\beta}h_{\beta}^{\mu}+\frac{1}{4}a_0\partial^{\beta}h_{\alpha}^{\alpha}\partial_{\mu}h_{\beta}^{\mu}-$$

$$\frac{1}{2}a_0h^{\alpha\beta}\partial_{\mu}\partial_{\beta}h_{\mu}^{\mu}+\frac{1}{4}a_0h_{\alpha}^{\alpha}\partial_{\mu}\partial_{\beta}h^{\beta\mu}+\frac{1}{4}a_0h^{\alpha\beta}\partial_{\mu}\partial^{\mu}h_{\alpha\beta}-$$

$$+\frac{1}{4}a_0h_{\alpha}^{\alpha}\partial_{\mu}\partial^{\mu}h_{\beta}^{\beta}-\frac{1}{4}a_0\partial_{\beta}h_{\alpha\mu}\partial^{\mu}h^{\alpha\beta}+\frac{1}{8}a_0\partial_{\mu}h_{\alpha\beta}\partial^{\mu}h^{\alpha\beta}+$$

$$+\frac{1}{2}a_0h_{\beta\mu}\partial^{\mu}\Gamma_{\alpha}^{\alpha\beta}+c_{13}\partial_{\alpha}^{\mu}\Gamma_{\mu}^{\nu}\partial^{\mu}\Gamma_{\alpha}^{\nu\beta}-c_{13}\partial_{\mu}\Gamma_{\alpha}^{\nu}\partial^{\mu}\Gamma^{\alpha\beta}_{\beta}$$

Added source term:  $|h^{\alpha\beta}\mathcal{T}_{\alpha\beta}+\Gamma^{\alpha\beta\chi}\Delta_{\alpha\beta\chi}$

$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta}$	$\frac{1}{4}(a_0-2a_1-a_2)$	0	$-\frac{1}{4}\sqrt{3}(2a_1+a_2+a_9)$	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta}$	$-\frac{1}{4}\sqrt{3}(2a_1+a_2+a_9)$	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta}$	$\frac{1}{4}\sqrt{3}(2a_1+a_2+a_9)$	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#2} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#3} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$\Gamma_{\alpha}^{\#4} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0
$h_{\alpha}^{\#1} \uparrow^{a\beta\chi}$	0	0	0	0	0	0	0