

$S_6(3).2 \pmod{2}$

	blocks	defect	matrix
$2.G :$	1	11	106×10
	2	5	16×2
	3	3	8×1
	4	2	4×1
	5	2	4×1

Block 1:	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	$\varphi_{5,0}$	φ_{6+}	φ_{8+}	φ_{10+}	φ_{12+}	$\varphi_{14,0}$	φ_{15+}
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.
$26_1 = \chi_{2+}$	.	1	.	.	.	.	.	.	.	.
$78_1 = \chi_{4,0}$	.	.	1	.	.	.	.	.	.	.
$78_2 = \chi_{4,1}$	.	.	1	.	.	.	.	.	.	.
$182_1 = \chi_{5+}$	.	1	2	.	.	.	.	.	.	.
$105_1 = \chi_{7,0}$	1	1	1	.	.	.	.	.	.	.
$105_2 = \chi_{7,1}$	1	1	1	.	.	.	.	.	.	.
$168_1 = \chi_{8,0}$	.	.	.	1	.	.	.	.	.	.
$168_2 = \chi_{8,1}$	.	.	.	1	.	.	.	.	.	.
$195_1 = \chi_{9,0}$	1	1	.	1	.	.	.	.	.	.
$195_2 = \chi_{9,1}$	1	1	.	1	.	.	.	.	.	.
$546_1 = \chi_{10+}$	.	1	.	.	1	.	.	.	.	.
$910_1 = \chi_{12+}$	2	2	.	2	1	.	.	.	.	.
$1092_1 = \chi_{14+}$	.	.	.	.	.	1	.	.	.	.
$1456_1 = \chi_{16+}$	.	.	.	.	.	.	1	.	.	.
$819_1 = \chi_{18,0}$	1	2	1	1	1	.	.	.	.	.
$819_2 = \chi_{18,1}$	1	2	1	1	1	.	.	.	.	.
$2340_1 = \chi_{19+}$	.	2	4	.	1	.	1	.	.	.
$2730_1 = \chi_{21+}$	2	4	4	2	1	.	1	.	.	.
$2730_2 = \chi_{23+}$	.	1	2	.	.	1	1	.	.	.
$2730_3 = \chi_{25+}$	.	1	2	.	1	.	.	1	.	.
$1820_1 = \chi_{27,0}$	.	.	1	.	.	.	.	.	1	.
$1820_2 = \chi_{27,1}$	.	.	1	.	.	.	.	.	1	.
$3640_1 = \chi_{28+}$	.	.	.	.	1	1	.	1	.	.
$2106_1 = \chi_{30,0}$	.	.	1	.	.	.	.	1	.	.
$2106_2 = \chi_{30,1}$	.	.	1	.	.	.	.	1	.	.
$4368_1 = \chi_{31+}$	.	2	4	.	1	.	1	1	.	.
$2457_1 = \chi_{33,0}$	1	1	.	1	1	.	.	.	1	.
$2457_2 = \chi_{33,1}$	1	1	.	1	1	.	.	.	1	.
$4914_1 = \chi_{34+}$	.	1	4	.	.	1	1	1	.	.
$2730_4 = \chi_{36,0}$	2	2	1	2	1	.	.	.	1	.
$2730_5 = \chi_{36,1}$	2	2	1	2	1	.	.	.	1	.
$2835_1 = \chi_{37,0}$	1	.	.	.	.	1	.	.	1	.
$2835_2 = \chi_{37,1}$	1	.	.	.	.	1	.	.	1	.
$7280_1 = \chi_{38+}$	.	4	8	.	2	.	1	2	.	.
$8190_1 = \chi_{40+}$	2	2	2	2	1	2	1	.	2	.
$4536_1 = \chi_{42,0}$	.	2	4	1	1	.	1	1	.	.
$4536_2 = \chi_{42,1}$	.	2	4	1	1	.	1	1	.	.
$5265_1 = \chi_{43,0}$	1	2	3	1	1	1	1	.	1	.

(Block 1:)	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	$\varphi_{5,0}$	φ_{6+}	φ_{8+}	φ_{10+}	φ_{12+}	$\varphi_{14,0}$	φ_{15+}
5265 ₂ = $\chi_{43,1}$	1	2	3	1	1	1	1	.	1	.
5460 ₁ = $\chi_{44,0}$	.	.	1	.	1	1	.	1	1	.
5460 ₂ = $\chi_{44,1}$	.	.	1	.	1	1	.	1	1	.
5460 ₃ = $\chi_{45,0}$	.	.	1	.	.	2	1	.	1	.
5460 ₄ = $\chi_{45,1}$	.	.	1	.	.	2	1	.	1	.
10920 ₁ = χ_{46+}	.	.	.	.	1	.	.	1	.	1
13104 ₁ = χ_{51+}	.	.	.	.	.	3	1	.	.	1
14742 ₁ = χ_{53+}	.	1	2	.	1	2	1	1	.	1
8190 ₂ = $\chi_{55,0}$	2	4	5	2	2	1	1	1	1	.
8190 ₃ = $\chi_{55,1}$	2	4	5	2	2	1	1	1	1	.
18954 ₁ = χ_{56+}	.	1	4	.	1	2	1	3	.	1
21840 ₁ = χ_{58+}	.	4	8	.	2	3	3	2	.	1
24570 ₁ = χ_{63+}	2	4	6	2	3	3	2	2	2	1
14560 ₁ = $\chi_{65,0}$	.	.	.	.	2	1	.	2	.	1
14560 ₂ = $\chi_{65,1}$	.	.	.	.	2	1	.	2	.	1
29120 ₁ = χ_{66+}	.	.	4	.	2	5	2	2	4	1
16380 ₁ = $\chi_{68,0}$	.	.	1	.	1	2	1	1	1	1
16380 ₂ = $\chi_{68,1}$	.	.	1	.	1	2	1	1	1	1
19683 ₁ = $\chi_{74,0}$	1	1	3	.	1	3	1	2	1	1
19683 ₂ = $\chi_{74,1}$	1	1	3	.	1	3	1	2	1	1
28 ₁ = χ_{75+}	2	1	.	.	.	.	.	.	.	.
182 ₂ = $\chi_{77,0}$	.	1	2	.	.	.	.	.	.	.
182 ₃ = $\chi_{77,1}$	.	1	2	.	.	.	.	.	.	.
364 ₁ = χ_{78+}	2	1	.	2	.	.	.	.	.	.
728 ₁ = χ_{80+}	.	2	2	.	1	.	.	.	.	.
520 ₁ = $\chi_{82,0}$	.	.	.	.	1	.	.	.	.	.
520 ₂ = $\chi_{82,1}$	.	.	.	.	1	.	.	.	.	.
1092 ₂ = χ_{83+}	2	3	2	2	1	.	.	.	.	.
1820 ₃ = χ_{85+}	.	2	4	.	.	.	1	.	.	.
1092 ₃ = $\chi_{87,0}$	.	.	.	.	.	1	.	.	.	.
1092 ₄ = $\chi_{87,1}$	.	.	.	.	.	1	.	.	.	.
2184 ₁ = χ_{88+}	.	2	2	.	1	.	1	.	.	.
2184 ₂ = χ_{90+}	.	.	2	.	.	.	.	1	.	.
2520 ₁ = χ_{92+}	.	2	2	2	1	.	1	.	.	.
3640 ₂ = χ_{94+}	.	.	.	.	.	2	1	.	.	.
2730 ₆ = $\chi_{96,0}$	.	1	2	.	.	1	1	.	.	.
2730 ₇ = $\chi_{96,1}$	.	1	2	.	.	1	1	.	.	.
2730 ₈ = $\chi_{97,0}$	.	1	2	.	1	.	.	1	.	.
2730 ₉ = $\chi_{97,1}$	.	1	2	.	1	.	.	1	.	.
5460 ₅ = χ_{98+}	2	5	6	2	2	.	1	1	.	.

(Block 1:)	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	$\varphi_{5,0}$	φ_{6+}	φ_{8+}	φ_{10+}	φ_{12+}	$\varphi_{14,0}$	φ_{15+}
$5460_6 = \chi_{100+}$	2	1	.	2	1	1	.	.	2	.
$3120_1 = \chi_{102,0}$	1	.	1	.	.
$3120_2 = \chi_{102,1}$	1	.	1	.	.
$6552_1 = \chi_{103+}$.	2	6	.	1	.	1	2	.	.
$7280_2 = \chi_{105+}$.	.	2	.	1	1	.	1	2	.
$4368_2 = \chi_{107,0}$.	2	4	.	1	.	1	1	.	.
$4368_3 = \chi_{107,1}$.	2	4	.	1	.	1	1	.	.
$8736_1 = \chi_{108+}$	4	6	4	4	3	1	1	.	2	.
$9828_1 = \chi_{110+}$	2	3	4	2	2	1	1	1	2	.
$5460_7 = \chi_{112,0}$.	2	4	.	1	1	1	1	.	.
$5460_8 = \chi_{112,1}$.	2	4	.	1	1	1	1	.	.
$10920_2 = \chi_{113+}$	1	1	.	.	1
$7280_3 = \chi_{118,0}$.	.	2	.	.	2	1	.	2	.
$7280_4 = \chi_{118,1}$.	.	2	.	.	2	1	.	2	.
$14560_3 = \chi_{119+}$	2	1	.	2	.	1
$16380_3 = \chi_{121+}$.	2	4	.	2	1	1	2	.	1
$19656_1 = \chi_{123+}$.	2	6	.	1	3	2	2	.	1
$20412_1 = \chi_{125+}$	2	1	2	.	1	4	1	1	2	1
$21840_2 = \chi_{127+}$.	.	2	.	1	4	2	1	2	1
$14040_1 = \chi_{132,0}$	1	1	.	2	.	1
$14040_2 = \chi_{132,1}$	1	1	.	2	.	1
$14742_2 = \chi_{133,0}$.	1	2	.	1	2	1	1	.	1
$14742_3 = \chi_{133,1}$.	1	2	.	1	2	1	1	.	1
$29484_1 = \chi_{134+}$	2	5	10	2	3	4	3	3	2	1
$21840_3 = \chi_{141,0}$.	.	2	.	2	3	1	2	2	1
$21840_4 = \chi_{141,1}$.	.	2	.	2	3	1	2	2	1

$$\begin{array}{ll}
\varphi_{1,0} = 1_1 & \varphi_{8+} = 1092_1 \\
\varphi_{2+} = 26_1 & \varphi_{10+} = 1456_1 \\
\varphi_{4,0} = 78_1 & \varphi_{12+} = 2028_1 \\
\varphi_{5,0} = 168_1 & \varphi_{14,0} = 1742_1 \\
\varphi_{6+} = 520_1 & \varphi_{15+} = 8372_1
\end{array}$$

Block 2:	$\varphi_{17,0}$	φ_{18+}
$5824_1 = \chi_{48,0}$	1	.
$5824_2 = \chi_{48,1}$	1	.
$11648_1 = \chi_{49+}$	.	1
$11648_2 = \chi_{60,0}$	.	1
$11648_3 = \chi_{60,1}$	.	1
$23296_1 = \chi_{61+}$	2	1
$17472_1 = \chi_{71,0}$	1	1
$17472_2 = \chi_{71,1}$	1	1
$5824_3 = \chi_{115,0}$	1	.
$5824_4 = \chi_{115,1}$	1	.
$11648_4 = \chi_{116+}$	.	1
$11648_5 = \chi_{129,0}$	.	1
$11648_6 = \chi_{129,1}$	.	1
$23296_2 = \chi_{130+}$	2	1
$17472_3 = \chi_{138,0}$	1	1
$17472_4 = \chi_{138,1}$	1	1

$$\begin{aligned}\varphi_{17,0} &= 5824_1 \\ \varphi_{18+} &= 11648_1\end{aligned}$$

Block 3:	$\varphi_{20,0}$
$16640_1 = \chi_{69,0}$	1
$16640_2 = \chi_{69,1}$	1
$16640_3 = \chi_{70,0}$	1
$16640_4 = \chi_{70,1}$	1
$16640_5 = \chi_{136,0}$	1
$16640_6 = \chi_{136,1}$	1
$16640_7 = \chi_{137,0}$	1
$16640_8 = \chi_{137,1}$	1

$$\varphi_{20,0} = 16640_1$$

Block 4:	$\varphi_{21,0}$
$17920_1 = \chi_{72,0}$	1
$17920_2 = \chi_{72,1}$	1
$17920_5 = \chi_{139,0}$	1
$17920_6 = \chi_{139,1}$	1

$$\varphi_{21,0} = 17920_1$$

Block 5:	$\varphi_{22,0}$
$17920_3 = \chi_{73,0}$	1
$17920_4 = \chi_{73,1}$	1
$17920_7 = \chi_{140,0}$	1
$17920_8 = \chi_{140,1}$	1

$$\varphi_{22,0} = 17920_2$$