

$S_6(3).2 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	1	7×6
	3	1	5×3
	4	0	$182_1 = \chi_{5+}, \varphi_{5+}$
	5	0	$105_1 = \chi_{7,0}, \varphi_{7,0}$
	6	0	$105_2 = \chi_{7,1}, \varphi_{7,1}$
	7	0	$168_1 = \chi_{8,0}, \varphi_{8,0}$
	8	0	$168_2 = \chi_{8,1}, \varphi_{8,1}$
	9	0	$546_1 = \chi_{10+}, \varphi_{10+}$
	10	0	$910_1 = \chi_{12+}, \varphi_{12+}$
	11	0	$1092_1 = \chi_{14+}, \varphi_{14+}$
	12	0	$1456_1 = \chi_{16+}, \varphi_{16+}$
	13	0	$819_1 = \chi_{18,0}, \varphi_{18,0}$
	14	0	$819_2 = \chi_{18,1}, \varphi_{18,1}$
	15	0	$2730_1 = \chi_{21+}, \varphi_{21+}$
	16	0	$2730_2 = \chi_{23+}, \varphi_{23+}$
	17	0	$2730_3 = \chi_{25+}, \varphi_{25+}$
	18	0	$1820_1 = \chi_{27,0}, \varphi_{27,0}$
	19	0	$1820_2 = \chi_{27,1}, \varphi_{27,1}$
	20	0	$3640_1 = \chi_{28+}, \varphi_{28+}$
	21	0	$4368_1 = \chi_{31+}, \varphi_{31+}$
	22	0	$2457_1 = \chi_{33,0}, \varphi_{33,0}$
	23	0	$2457_2 = \chi_{33,1}, \varphi_{33,1}$
	24	0	$4914_1 = \chi_{34+}, \varphi_{34+}$
	25	0	$2730_4 = \chi_{36,0}, \varphi_{36,0}$
	26	0	$2730_5 = \chi_{36,1}, \varphi_{36,1}$
	27	0	$2835_1 = \chi_{37,0}, \varphi_{37,0}$
	28	0	$2835_2 = \chi_{37,1}, \varphi_{37,1}$
	29	0	$7280_1 = \chi_{38+}, \varphi_{38+}$
	30	0	$8190_1 = \chi_{40+}, \varphi_{40+}$
	31	0	$4536_1 = \chi_{42,0}, \varphi_{42,0}$
	32	0	$4536_2 = \chi_{42,1}, \varphi_{42,1}$
	33	0	$5460_1 = \chi_{44,0}, \varphi_{44,0}$
	34	0	$5460_2 = \chi_{44,1}, \varphi_{44,1}$
	35	0	$5460_3 = \chi_{45,0}, \varphi_{45,0}$
	36	0	$5460_4 = \chi_{45,1}, \varphi_{45,1}$
	37	0	$10920_1 = \chi_{46+}, \varphi_{46+}$
	38	0	$5824_1 = \chi_{48,0}, \varphi_{48,0}$
	39	0	$5824_2 = \chi_{48,1}, \varphi_{48,1}$
	40	0	$11648_1 = \chi_{49+}, \varphi_{49+}$

	blocks	defect	matrix
	41	0	$13104_1 = \chi_{51+}, \varphi_{51+}$
	42	0	$14742_1 = \chi_{53+}, \varphi_{53+}$
	43	0	$8190_2 = \chi_{55,0}, \varphi_{55,0}$
	44	0	$8190_3 = \chi_{55,1}, \varphi_{55,1}$
	45	0	$21840_1 = \chi_{58+}, \varphi_{58+}$
	46	0	$11648_2 = \chi_{60,0}, \varphi_{60,0}$
	47	0	$11648_3 = \chi_{60,1}, \varphi_{60,1}$
	48	0	$23296_1 = \chi_{61+}, \varphi_{61+}$
	49	0	$24570_1 = \chi_{63+}, \varphi_{63+}$
	50	0	$14560_1 = \chi_{65,0}, \varphi_{65,0}$
	51	0	$14560_2 = \chi_{65,1}, \varphi_{65,1}$
	52	0	$29120_1 = \chi_{66+}, \varphi_{66+}$
	53	0	$16380_1 = \chi_{68,0}, \varphi_{69,0}$
	54	0	$16380_2 = \chi_{68,1}, \varphi_{69,1}$
	55	0	$17472_1 = \chi_{71,0}, \varphi_{70,0}$
	56	0	$17472_2 = \chi_{71,1}, \varphi_{70,1}$
	57	0	$17920_1 = \chi_{72,0}, \varphi_{71,0}$
	58	0	$17920_2 = \chi_{72,1}, \varphi_{71,1}$
	59	0	$17920_3 = \chi_{73,0}, \varphi_{72,0}$
	60	0	$17920_4 = \chi_{73,1}, \varphi_{72,1}$
2.G :	61	0	$28_1 = \chi_{75+}, \varphi_{73+}$
	62	0	$182_2 = \chi_{77,0}, \varphi_{75,0}$
	$63 = \overline{62}$	0	$182_3 = \chi_{77,1}, \varphi_{75,1}$
	64	0	$364_1 = \chi_{78+}, \varphi_{76+}$
	65	0	$728_1 = \chi_{80+}, \varphi_{78+}$
	66	1	5×3
	$67 = \overline{66}$	1	5×3
	68	0	$1092_2 = \chi_{83+}, \varphi_{81+}$
	69	0	$1820_3 = \chi_{85+}, \varphi_{83+}$
	70	0	$1092_3 = \chi_{87,0}, \varphi_{85,0}$
	$71 = \overline{70}$	0	$1092_4 = \chi_{87,1}, \varphi_{85,1}$
	72	0	$2184_1 = \chi_{88+}, \varphi_{86+}$
	73	0	$2184_2 = \chi_{90+}, \varphi_{88+}$
	74	0	$2520_1 = \chi_{92+}, \varphi_{90+}$
	75	0	$3640_2 = \chi_{94+}, \varphi_{92+}$
	76	0	$2730_6 = \chi_{96,0}, \varphi_{94,0}$
	$77 = \overline{76}$	0	$2730_7 = \chi_{96,1}, \varphi_{94,1}$
	78	0	$2730_8 = \chi_{97,0}, \varphi_{95,0}$
	$79 = \overline{78}$	0	$2730_9 = \chi_{97,1}, \varphi_{95,1}$
	80	0	$5460_5 = \chi_{98+}, \varphi_{96+}$

	blocks	defect	matrix
	81	0	$5460_6 = \chi_{100+}, \varphi_{98+}$
	82	0	$6552_1 = \chi_{103+}, \varphi_{101+}$
	83	0	$7280_2 = \chi_{105+}, \varphi_{103+}$
	84	0	$4368_2 = \chi_{107,0}, \varphi_{105,0}$
	$85 = \overline{84}$	0	$4368_3 = \chi_{107,1}, \varphi_{105,1}$
	86	0	$8736_1 = \chi_{108+}, \varphi_{106+}$
	87	0	$9828_1 = \chi_{110+}, \varphi_{108+}$
	88	0	$5460_7 = \chi_{112,0}, \varphi_{110,0}$
	$89 = \overline{88}$	0	$5460_8 = \chi_{112,1}, \varphi_{110,1}$
	90	0	$10920_2 = \chi_{113+}, \varphi_{111+}$
	91	0	$5824_3 = \chi_{115,0}, \varphi_{113,0}$
	$92 = \overline{91}$	0	$5824_4 = \chi_{115,1}, \varphi_{113,1}$
	93	0	$11648_4 = \chi_{116+}, \varphi_{114+}$
	94	0	$7280_3 = \chi_{118,0}, \varphi_{116,0}$
	$95 = \overline{94}$	0	$7280_4 = \chi_{118,1}, \varphi_{116,1}$
	96	0	$14560_3 = \chi_{119+}, \varphi_{117+}$
	97	0	$16380_3 = \chi_{121+}, \varphi_{119+}$
	98	0	$19656_1 = \chi_{123+}, \varphi_{121+}$
	99	0	$20412_1 = \chi_{125+}, \varphi_{123+}$
	100	0	$21840_2 = \chi_{127+}, \varphi_{125+}$
	101	0	$11648_5 = \chi_{129,0}, \varphi_{127,0}$
	$102 = \overline{101}$	0	$11648_6 = \chi_{129,1}, \varphi_{127,1}$
	103	0	$23296_2 = \chi_{130+}, \varphi_{128+}$
	104	0	$14742_2 = \chi_{133,0}, \varphi_{131,0}$
	$105 = \overline{104}$	0	$14742_3 = \chi_{133,1}, \varphi_{131,1}$
	106	0	$29484_1 = \chi_{134+}, \varphi_{132+}$
	107	0	$17472_3 = \chi_{138,0}, \varphi_{134,0}$
	$108 = \overline{107}$	0	$17472_4 = \chi_{138,1}, \varphi_{134,1}$
	109	0	$17920_5 = \chi_{139,0}, \varphi_{135,0}$
	$110 = \overline{109}$	0	$17920_6 = \chi_{139,1}, \varphi_{135,1}$
	111	0	$17920_7 = \chi_{140,0}, \varphi_{136,0}$
	$112 = \overline{111}$	0	$17920_8 = \chi_{140,1}, \varphi_{136,1}$
	113	0	$21840_3 = \chi_{141,0}, \varphi_{137,0}$
	$114 = \overline{113}$	0	$21840_4 = \chi_{141,1}, \varphi_{137,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{4,1}$	$\varphi_{9,0}$	$\varphi_{30,0}$	$\varphi_{43,0}$	$\varphi_{68,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	$\varphi_{1,0} = 1_1$
$78_2 = \chi_{4,1}$	.	1	.	.	.	.	$\varphi_{4,1} = 78_2$
$195_1 = \chi_{9,0}$	1	.	1	.	.	.	$\varphi_{9,0} = 194_1$
$2106_1 = \chi_{30,0}$	.	1	.	1	.	.	$\varphi_{30,0} = 2028_1$
$5265_1 = \chi_{43,0}$	.	.	1	.	1	.	$\varphi_{43,0} = 5071_1$
$16640_3 = \chi_{70,0}$	.	.	.	1	.	1	$\varphi_{68,0} = 14612_1$
$19683_1 = \chi_{74,0}$	.	.	.	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{4,0}$	$\varphi_{9,1}$	$\varphi_{30,1}$	$\varphi_{43,1}$	$\varphi_{68,1}$	
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	$\varphi_{1,1} = 1_2$
$78_1 = \chi_{4,0}$	.	1	.	.	.	.	$\varphi_{4,0} = 78_1$
$195_2 = \chi_{9,1}$	1	.	1	.	.	.	$\varphi_{9,1} = 194_2$
$2106_2 = \chi_{30,1}$	.	1	.	1	.	.	$\varphi_{30,1} = 2028_2$
$5265_2 = \chi_{43,1}$	.	.	1	.	1	.	$\varphi_{43,1} = 5071_2$
$16640_4 = \chi_{70,1}$	.	.	.	1	.	1	$\varphi_{68,1} = 14612_2$
$19683_2 = \chi_{74,1}$	.	.	.	.	1	1	

Block 3:	φ_{2+}	φ_{19+}	φ_{56+}	
$26_1 = \chi_{2+}$	1	.	.	$\varphi_{2+} = 26_1$
$2340_1 = \chi_{19+}$	1	1	.	$\varphi_{19+} = 2314_1$
$18954_1 = \chi_{56+}$	.	1	1	$\varphi_{56+} = 16640_1$
$16640_1 = \chi_{69,0}$	.	.	1	
$16640_2 = \chi_{69,1}$	.	.	1	

Block 66:	$\varphi_{80,0}$	$\varphi_{100,1}$	$\varphi_{130,0}$	
$520_1 = \chi_{82,0}$	1	.	.	$\varphi_{80,0} = 520_1$
$3120_2 = \chi_{102,1}$	.	1	.	$\varphi_{100,1} = 3120_2$
$14040_1 = \chi_{132,0}$	1	.	1	$\varphi_{130,0} = 13520_1$
$16640_6 = \chi_{136,1}$	.	1	1	
$16640_8 = \chi_{137,1}$	.	1	1	

Block 67:	$\varphi_{80,1}$	$\varphi_{100,0}$	$\varphi_{130,1}$
$520_2 = \chi_{82,1}$	1	.	.
$3120_1 = \chi_{102,0}$	.	1	.
$14040_2 = \chi_{132,1}$	1	.	1
$16640_5 = \chi_{136,0}$	.	1	1
$16640_7 = \chi_{137,0}$	.	1	1

$$\begin{aligned} \varphi_{80,1} &= 520_2 \\ \varphi_{100,0} &= 3120_1 \\ \varphi_{130,1} &= 13520_2 \end{aligned}$$