$O_7(3).2 \pmod 7$

	blocks	defect	matrix
$G:$	1	1	7×6
	2	1	7×6
	3	0	$91_1 = \chi_{3,0}, \varphi_{3,0}$
	4	0	$91_2 = \chi_{3,1}, \varphi_{3,1}$
	5	0	$105_1 = \chi_{4,0}, \varphi_{4,0}$
	6	0	$105_2 = \chi_{4,1}, \varphi_{4,1}$
	7	0	$168_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$168_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$182_1 = \chi_{6,0}, \varphi_{6,0}$
	10	0	$182_2 = \chi_{6,1}, \varphi_{6,1}$
	11	1	5×3
	12	0	$273_1 = \chi_{10,0}, \varphi_{10,0}$
	13	0	$273_2 = \chi_{10,1}, \varphi_{10,1}$
	14	0	$546_1 = \chi_{11,0}, \varphi_{11,0}$
	15	0	$546_2 = \chi_{11,1}, \varphi_{11,1}$
	16	0	$819_1 = \chi_{12,0}, \varphi_{12,0}$
	17	0	$819_2 = \chi_{12,1}, \varphi_{12,1}$
	18	0	$1820_1 = \chi_{13+}, \varphi_{13+}$
	19	0	$1092_1 = \chi_{15,0}, \varphi_{15,0}$
	20	0	$1092_2 = \chi_{15,1}, \varphi_{15,1}$
	21	0	$1365_1 = \chi_{16,0}, \varphi_{16,0}$
	22	0	$1365_2 = \chi_{16,1}, \varphi_{16,1}$
	23	0	$1365_3 = \chi_{17,0}, \varphi_{17,0}$
	24	0	$1365_4 = \chi_{17,1}, \varphi_{17,1}$
	25	0	$1638_1 = \chi_{20,0}, \varphi_{20,0}$
	26	0	$1638_2 = \chi_{20,1}, \varphi_{20,1}$
	27	0	$1820_2 = \chi_{21,0}, \varphi_{21,0}$
	28	0	$1820_3 = \chi_{21,1}, \varphi_{21,1}$
	29	0	$2184_1 = \chi_{23,0}, \varphi_{23,0}$
	30	0	$2184_2 = \chi_{23,1}, \varphi_{23,1}$
	31	0	$2457_1 = \chi_{24,0}, \varphi_{24,0}$
	32	0	$2457_2 = \chi_{24,1}, \varphi_{24,1}$
	33	0	$2730_1 = \chi_{25,0}, \varphi_{25,0}$
	34	0	$2730_2 = \chi_{25,1}, \varphi_{25,1}$
	35	0	$2730_3 = \chi_{26,0}, \varphi_{26,0}$
	36	0	$2730_4 = \chi_{26,1}, \varphi_{26,1}$
	37	0	$2835_1 = \chi_{27,0}, \varphi_{27,0}$
	38	0	$2835_2 = \chi_{27,1}, \varphi_{27,1}$
	39	0	$4095_1 = \chi_{28,0}, \varphi_{28,0}$
	40	0	$4095_2 = \chi_{28,1}, \varphi_{28,1}$

	blocks	defect	matrix
	41	0	$4095_3 = \chi_{29,0}, \varphi_{29,0}$
	42	0	$4095_4 = \chi_{29,1}, \varphi_{29,1}$
	43	0	$4368_1 = \chi_{30,0}, \varphi_{30,0}$
	44	0	$4368_2 = \chi_{30,1}, \varphi_{30,1}$
	45	0	$4536_1 = \chi_{31,0}, \varphi_{31,0}$
	46	0	$4536_2 = \chi_{31,1}, \varphi_{31,1}$
	47	0	$5460_1 = \chi_{33,0}, \varphi_{33,0}$
	48	0	$5460_2 = \chi_{33,1}, \varphi_{33,1}$
	49	0	$5460_3 = \chi_{34,0}, \varphi_{34,0}$
	50	0	$5460_4 = \chi_{34,1}, \varphi_{34,1}$
	51	0	$5460_5 = \chi_{35,0}, \varphi_{35,0}$
	52	0	$5460_6 = \chi_{35,1}, \varphi_{35,1}$
	53	0	$5824_1 = \chi_{36,0}, \varphi_{36,0}$
	54	0	$5824_2 = \chi_{36,1}, \varphi_{36,1}$
	55	0	$5824_3 = \chi_{37,0}, \varphi_{37,0}$
	56	0	$5824_4 = \chi_{37,1}, \varphi_{37,1}$
	57	0	$6552_1 = \chi_{38,0}, \varphi_{38,0}$
	58	0	$6552_2 = \chi_{38,1}, \varphi_{38,1}$
	59	0	$7280_1 = \chi_{41,0}, \varphi_{41,0}$
	60	0	$7280_2 = \chi_{41,1}, \varphi_{41,1}$
	61	0	$14560_1 = \chi_{42+}, \varphi_{42+}$
	62	0	$7371_1 = \chi_{44,0}, \varphi_{44,0}$
	63	0	$7371_2 = \chi_{44,1}, \varphi_{44,1}$
	64	0	$16380_1 = \chi_{45+}, \varphi_{45+}$
	65	0	$11648_1 = \chi_{47,0}, \varphi_{47,0}$
	66	0	$11648_2 = \chi_{47,1}, \varphi_{47,1}$
	67	0	$14742_1 = \chi_{48,0}, \varphi_{49,0}$
	68	0	$14742_2 = \chi_{48,1}, \varphi_{49,1}$
	69	0	$16380_2 = \chi_{49,0}, \varphi_{50,0}$
	70	0	$16380_3 = \chi_{49,1}, \varphi_{50,1}$
	71	0	$17472_1 = \chi_{52,0}, \varphi_{51,0}$
	72	0	$17472_2 = \chi_{52,1}, \varphi_{51,1}$
	73	0	$17472_3 = \chi_{53,0}, \varphi_{52,0}$
	74	0	$17472_4 = \chi_{53,1}, \varphi_{52,1}$
	75	0	$17920_1 = \chi_{54,0}, \varphi_{53,0}$
	76	0	$17920_2 = \chi_{54,1}, \varphi_{53,1}$
	77	0	$17920_3 = \chi_{55,0}, \varphi_{54,0}$
	78	0	$17920_4 = \chi_{55,1}, \varphi_{54,1}$
	79	0	$21840_1 = \chi_{57,0}, \varphi_{55,0}$
	80	0	$21840_2 = \chi_{57,1}, \varphi_{55,1}$

	blocks	defect	matrix
	81	0	$22113_1 = \chi_{58,0}, \varphi_{56,0}$
	82	0	$22113_2 = \chi_{58,1}, \varphi_{56,1}$
$2.G:$	83	1	5×3
	84	1	5×3
	85	0	$1120_1 = \chi_{60+}, \varphi_{58+}$
	86	0	$1456_1 = \chi_{62,0}, \varphi_{60,0}$
	87	0	$1456_2 = \chi_{62,1}, \varphi_{60,1}$
	88	0	$2912_1 = \chi_{63+}, \varphi_{61+}$
	89	0	$3640_1 = \chi_{66,0}, \varphi_{64,0}$
	90	0	$3640_2 = \chi_{66,1}, \varphi_{64,1}$
	91	0	$13440_1 = \chi_{67+}, \varphi_{65+}$
	92	0	$7280_3 = \chi_{69,0}, \varphi_{67,0}$
	93	0	$7280_4 = \chi_{69,1}, \varphi_{67,1}$
	94	0	$7280_5 = \chi_{70,0}, \varphi_{68,0}$
	95	0	$7280_6 = \chi_{70,1}, \varphi_{68,1}$
	96	0	$14560_2 = \chi_{71+}, \varphi_{69+}$
	97	0	$10920_1 = \chi_{73,0}, \varphi_{71,0}$
	98	0	$10920_2 = \chi_{73,1}, \varphi_{71,1}$
	99	0	$11648_3 = \chi_{74,0}, \varphi_{72,0}$
	100	0	$11648_4 = \chi_{74,1}, \varphi_{72,1}$
	101	0	$11648_5 = \chi_{75,0}, \varphi_{73,0}$
	102	0	$11648_6 = \chi_{75,1}, \varphi_{73,1}$
	103	0	$13104_1 = \chi_{76,0}, \varphi_{74,0}$
	104	0	$13104_2 = \chi_{76,1}, \varphi_{74,1}$
	105	0	$26208_1 = \chi_{77+}, \varphi_{75+}$
	106	0	$30240_1 = \chi_{80+}, \varphi_{78+}$
	107	0	$17920_5 = \chi_{84,0}, \varphi_{80,0}$
	108	0	$17920_6 = \chi_{84,1}, \varphi_{80,1}$
	109	0	$17920_7 = \chi_{85,0}, \varphi_{81,0}$
	110	0	$17920_8 = \chi_{85,1}, \varphi_{81,1}$
	111	0	$21840_3 = \chi_{86,0}, \varphi_{82,0}$
	112	0	$21840_4 = \chi_{86,1}, \varphi_{82,1}$
	113	0	$21840_5 = \chi_{87,0}, \varphi_{83,0}$

	blocks	defect	matrix
	114	0	$21840_6 = \chi_{87,1}, \varphi_{83,1}$
	115	0	$23296_1 = \chi_{88,0}, \varphi_{84,0}$
	116	0	$23296_2 = \chi_{88,1}, \varphi_{84,1}$
$3.G:$	117	1	7×6
	118	1	7×6
	119	0	$756_1 = \chi_{92+}, \varphi_{88+}$
	120	0	$4914_1 = \chi_{95+}, \varphi_{92+}$
	121	0	$4914_2 = \chi_{96+}, \varphi_{93+}$
	122	0	$4914_3 = \chi_{97+}, \varphi_{94+}$
	123	0	$9828_1 = \chi_{100+}, \varphi_{97+}$
	124	0	$9828_2 = \chi_{101+}, \varphi_{98+}$
	125	0	$14742_3 = \chi_{104+}, \varphi_{100+}$
	126	0	$14742_4 = \chi_{105+}, \varphi_{101+}$
	127	0	$15120_1 = \chi_{106+}, \varphi_{102+}$
	128	0	$15120_2 = \chi_{107+}, \varphi_{103+}$
	129	0	$19656_1 = \chi_{109+}, \varphi_{105+}$
	130	0	$24570_1 = \chi_{110+}, \varphi_{106+}$
	131	0	$24570_2 = \chi_{111+}, \varphi_{107+}$
	132	0	$24570_3 = \chi_{112+}, \varphi_{108+}$
	133	0	$24570_4 = \chi_{113+}, \varphi_{109+}$
	134	0	$24570_5 = \chi_{114+}, \varphi_{110+}$
	135	0	$29484_1 = \chi_{115+}, \varphi_{112+}$
	136	0	$39312_1 = \chi_{117+}, \varphi_{114+}$
	137	0	$39312_2 = \chi_{118+}, \varphi_{115+}$
	138	0	$48384_1 = \chi_{122+}, \varphi_{116+}$
$6.G:$	139	0	$9072_1 = \chi_{123+}, \varphi_{117+}$
	140	0	$24192_1 = \chi_{124+}, \varphi_{119+}$
	141	0	$24192_2 = \chi_{125+}, \varphi_{120+}$
	142	1	5×3
	143	0	$30240_2 = \chi_{127+}, \varphi_{122+}$
	144	0	$39312_3 = \chi_{128+}, \varphi_{123+}$
	145	0	$48384_2 = \chi_{132+}, \varphi_{125+}$
	146	0	$48384_3 = \chi_{133+}, \varphi_{126+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{2,1}$	$\varphi_{7,0}$	$\varphi_{22,1}$	$\varphi_{32,0}$	$\varphi_{48,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.
$78_2 = \chi_{2,1}$	.	1	.	.	.	.
$195_1 = \chi_{7,0}$	1	.	1	.	.	.
$2106_2 = \chi_{22,1}$	.	1	.	1	.	.
$5265_1 = \chi_{32,0}$	.	.	1	.	1	.
$16640_3 = \chi_{51,0}$	.	.	.	1	.	1
$19683_1 = \chi_{56,0}$	.	.	.	.	1	1

$\varphi_{1,0} = 1_1$
$\varphi_{2,1} = 78_2$
$\varphi_{7,0} = 194_1$
$\varphi_{22,1} = 2028_2$
$\varphi_{32,0} = 5071_1$
$\varphi_{48,0} = 14612_1$

Block 2:	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{7,1}$	$\varphi_{22,0}$	$\varphi_{32,1}$	$\varphi_{48,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.
$78_1 = \chi_{2,0}$	.	1	.	.	.	.
$195_2 = \chi_{7,1}$	1	.	1	.	.	.
$2106_1 = \chi_{22,0}$	.	1	.	1	.	.
$5265_2 = \chi_{32,1}$	.	.	1	.	1	.
$16640_4 = \chi_{51,1}$	.	.	.	1	.	1
$19683_2 = \chi_{56,1}$	.	.	.	.	1	1

$\varphi_{1,1} = 1_2$
$\varphi_{2,0} = 78_1$
$\varphi_{7,1} = 194_2$
$\varphi_{22,0} = 2028_1$
$\varphi_{32,1} = 5071_2$
$\varphi_{48,1} = 14612_2$

Block 11:	φ_{8+}	φ_{18+}	φ_{39+}
$520_1 = \chi_{8+}$	1	.	.
$3120_1 = \chi_{18+}$	.	1	.
$14040_1 = \chi_{39+}$	1	.	1
$16640_1 = \chi_{50,0}$	.	1	1
$16640_2 = \chi_{50,1}$	.	1	1

$\varphi_{8+} = 520_1$
$\varphi_{18+} = 3120_1$
$\varphi_{39+} = 13520_1$

Block 83:	$\varphi_{57,0}$	$\varphi_{63,1}$	$\varphi_{77,0}$
$520_2 = \chi_{59,0}$	1	.	.
$3120_3 = \chi_{65,1}$	.	1	.
$14040_2 = \chi_{79,0}$	1	.	1
$16640_5 = \chi_{82,0}$	.	1	1
$16640_7 = \chi_{83,0}$	.	1	1

$\varphi_{57,0} = 520_2$
$\varphi_{63,1} = 3120_3$
$\varphi_{77,0} = 13520_2$

Block 84:	$\varphi_{57,1}$	$\varphi_{63,0}$	$\varphi_{77,1}$
$520_3 = \chi_{59,1}$	1	.	.
$3120_2 = \chi_{65,0}$	.	1	.
$14040_3 = \chi_{79,1}$	1	.	1
$16640_6 = \chi_{82,1}$	.	1	1
$16640_8 = \chi_{83,1}$	.	1	1

$\varphi_{57,1} = 520_3$
$\varphi_{63,0} = 3120_2$
$\varphi_{77,1} = 13520_3$

Block 117:	φ_{85+}	φ_{86+}	φ_{91+}	φ_{96+}	φ_{104+}	φ_{111+}
$54_1 = \chi_{89+}$	1	.	.	.	.	.
$702_1 = \chi_{90+}$	1	1	.	.	.	.
$3456_2 = \chi_{94+}$	.	.	1	.	.	.
$10530_1 = \chi_{102+}$	.	.	1	1	.	.
$18954_1 = \chi_{108+}$	.	1	.	.	1	.
$33696_1 = \chi_{116+}$	.	.	.	1	.	1
$44928_1 = \chi_{120+}$	.	.	.	.	1	1

$\varphi_{85+} = 54_1$
$\varphi_{86+} = 648_1$
$\varphi_{91+} = 3456_1$
$\varphi_{96+} = 7074_1$
$\varphi_{104+} = 18306_1$
$\varphi_{111+} = 26622_1$

Block 118:	φ_{87+}	φ_{89+}	φ_{90+}	φ_{95+}	φ_{99+}	φ_{113+}
$702_2 = \chi_{91+}$	1	.	.	.	.	.
$3456_1 = \chi_{93+}$	1	1	.	.	.	.
$5616_1 = \chi_{98+}$	.	.	.	1	.	.
$5616_2 = \chi_{99+}$	.	1	1	.	.	.
$14040_4 = \chi_{103+}$	.	.	1	.	1	.
$39366_1 = \chi_{119+}$	.	.	.	1	.	1
$44928_2 = \chi_{121+}$	.	.	.	.	1	1

$\varphi_{87+} = 702_1$
$\varphi_{89+} = 2754_1$
$\varphi_{90+} = 2862_1$
$\varphi_{95+} = 5616_1$
$\varphi_{99+} = 11178_1$
$\varphi_{113+} = 33750_1$

Block 142:	φ_{118+}	φ_{121+}	φ_{124+}
$28080_1 = \chi_{126+}$	.	1	.
$41472_1 = \chi_{129+}$	1	1	.
$44928_3 = \chi_{130+}$	.	.	1
$44928_4 = \chi_{131+}$	.	.	1
$58320_1 = \chi_{134+}$	1	.	1

$\varphi_{118+} = 13392_1$
$\varphi_{121+} = 28080_1$
$\varphi_{124+} = 44928_1$