

$O_8^-(3) \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	0	$287_1 = \chi_3, \varphi_3$
	3	0	$287_2 = \chi_4, \varphi_4$
	4	1	7×6
	5	0	$574_1 = \chi_7, \varphi_7$
	6	0	$819_1 = \chi_8, \varphi_8$
	7	0	$3731_1 = \chi_9, \varphi_9$
	8	0	$3731_2 = \chi_{10}, \varphi_{10}$
	9	0	$7749_1 = \chi_{11}, \varphi_{11}$
	10	0	$7749_2 = \chi_{12}, \varphi_{12}$
	11	0	$11193_1 = \chi_{13}, \varphi_{13}$
	12	0	$11193_2 = \chi_{14}, \varphi_{14}$
	13	0	$11193_3 = \chi_{15}, \varphi_{15}$
	14	0	$11193_4 = \chi_{16}, \varphi_{16}$
	15	0	$14924_1 = \chi_{19}, \varphi_{19}$
	16	0	$14924_2 = \chi_{20}, \varphi_{20}$
	17	0	$14924_3 = \chi_{21}, \varphi_{21}$
	18	1	5×3
	19	0	$22386_1 = \chi_{23}, \varphi_{23}$
	20	0	$22386_2 = \chi_{24}, \varphi_{24}$
	21	0	$25830_1 = \chi_{25}, \varphi_{25}$
	22	0	$25830_2 = \chi_{26}, \varphi_{26}$
	23	0	$33579_1 = \chi_{27}, \varphi_{27}$
	24	0	$33579_2 = \chi_{28}, \varphi_{28}$
	25	0	$33579_3 = \chi_{29}, \varphi_{29}$
	26	0	$33579_4 = \chi_{30}, \varphi_{30}$
	27	0	$37310_1 = \chi_{31}, \varphi_{31}$
	28	0	$37310_2 = \chi_{32}, \varphi_{32}$
	29	0	$44772_1 = \chi_{33}, \varphi_{33}$
	30	0	$51660_1 = \chi_{36}, \varphi_{36}$
	31	0	$59696_1 = \chi_{37}, \varphi_{37}$
	32	0	$59696_2 = \chi_{38}, \varphi_{38}$
	33	0	$59696_3 = \chi_{39}, \varphi_{39}$
	34	0	$66339_1 = \chi_{40}, \varphi_{40}$
	35	0	$74620_1 = \chi_{41}, \varphi_{41}$
	36	0	$74620_2 = \chi_{42}, \varphi_{42}$
	37	0	$100737_1 = \chi_{43}, \varphi_{43}$
	38	0	$100737_2 = \chi_{44}, \varphi_{44}$
	39	0	$100737_3 = \chi_{45}, \varphi_{45}$
	40	0	$100737_4 = \chi_{46}, \varphi_{46}$

	blocks	defect	matrix
	41	0	$119392_1 = \chi_{47}, \varphi_{47}$
	42	0	$119392_2 = \chi_{48}, \varphi_{48}$
	43	0	$119392_3 = \chi_{49}, \varphi_{49}$
	44	0	$119392_4 = \chi_{50}, \varphi_{50}$
	45	0	$134316_1 = \chi_{52}, \varphi_{52}$
	46	0	$134316_2 = \chi_{53}, \varphi_{53}$
	47	0	$134316_3 = \chi_{54}, \varphi_{54}$
	48	0	$179088_1 = \chi_{55}, \varphi_{56}$
	49	0	$179088_2 = \chi_{56}, \varphi_{57}$
	50	0	$179088_3 = \chi_{57}, \varphi_{58}$
	51	0	$179088_4 = \chi_{58}, \varphi_{59}$
	52	0	$201474_1 = \chi_{60}, \varphi_{60}$
	53	0	$201474_2 = \chi_{61}, \varphi_{61}$
	54	0	$209223_1 = \chi_{62}, \varphi_{62}$
	55	0	$209223_2 = \chi_{63}, \varphi_{63}$
	56	0	$223860_1 = \chi_{64}, \varphi_{64}$
	57	0	$223860_2 = \chi_{65}, \varphi_{65}$
	58	0	$223860_3 = \chi_{66}, \varphi_{66}$
	59	0	$238784_1 = \chi_{67}, \varphi_{67}$
	60	0	$238784_2 = \chi_{68}, \varphi_{68}$
	61	0	$298480_1 = \chi_{69}, \varphi_{69}$
	62	0	$298480_2 = \chi_{70}, \varphi_{70}$
	63	0	$302211_1 = \chi_{71}, \varphi_{71}$
	64	0	$302211_2 = \chi_{72}, \varphi_{72}$
	65	0	$335790_1 = \chi_{73}, \varphi_{73}$
	66	0	$335790_2 = \chi_{74}, \varphi_{74}$
	67	0	$358176_1 = \chi_{75}, \varphi_{77}$
	68	0	$358176_2 = \chi_{76}, \varphi_{78}$
	69	0	$367360_1 = \chi_{77}, \varphi_{79}$
	70	0	$367360_2 = \chi_{78}, \varphi_{80}$
	71	0	$367360_3 = \chi_{79}, \varphi_{81}$
	72	0	$367360_4 = \chi_{80}, \varphi_{82}$
	73	0	$367360_5 = \chi_{81}, \varphi_{83}$
	74	0	$367360_6 = \chi_{82}, \varphi_{84}$
	75	0	$367360_7 = \chi_{83}, \varphi_{85}$
	76	0	$367360_8 = \chi_{84}, \varphi_{86}$
	77	0	$402948_1 = \chi_{87}, \varphi_{87}$
	78	0	$418446_1 = \chi_{88}, \varphi_{88}$
	79	0	$465920_1 = \chi_{89}, \varphi_{89}$
	80	0	$465920_2 = \chi_{90}, \varphi_{90}$

	blocks	defect	matrix
	81	0	$465920_3 = \chi_{91}, \varphi_{91}$
	82	0	$465920_4 = \chi_{92}, \varphi_{92}$
	83	0	$465920_5 = \chi_{93}, \varphi_{93}$
	84	0	$465920_6 = \chi_{94}, \varphi_{94}$
	85	0	$465920_7 = \chi_{95}, \varphi_{95}$
	86	0	$465920_8 = \chi_{96}, \varphi_{96}$
	87	0	$465920_9 = \chi_{97}, \varphi_{97}$
	88	0	$465920_{10} = \chi_{98}, \varphi_{98}$

	blocks	defect	matrix
	89	0	$477568_1 = \chi_{99}, \varphi_{99}$
	90	0	$477568_2 = \chi_{100}, \varphi_{100}$
	91	0	$477568_3 = \chi_{101}, \varphi_{101}$
	92	0	$477568_4 = \chi_{102}, \varphi_{102}$
	93	0	$537264_1 = \chi_{104}, \varphi_{104}$
	94	0	$537264_2 = \chi_{105}, \varphi_{105}$
	95	0	$537264_3 = \chi_{106}, \varphi_{106}$
	96	0	$596960_1 = \chi_{108}, \varphi_{108}$

Block 1:	φ_1	φ_2	φ_{17}	φ_{18}	φ_{55}	φ_{103}
$1_1 = \chi_1$	1	.	.	.	.	.
$246_1 = \chi_2$	.	1	.	.	.	.
$14391_1 = \chi_{17}$	.	1	1	.	.	.
$14391_2 = \chi_{18}$	1	.	.	1	.	.
$179334_1 = \chi_{59}$	.	.	.	1	1	.
$531441_1 = \chi_{103}$	.	.	1	.	.	1
$682240_2 = \chi_{110}$	.	.	.	.	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_2 &= 246_1 \\ \varphi_{17} &= 14145_1 \\ \varphi_{18} &= 14390_1 \\ \varphi_{55} &= 164944_1 \\ \varphi_{103} &= 517296_1 \end{aligned}$$

Block 4:	φ_5	φ_6	φ_{34}	φ_{35}	φ_{75}	φ_{76}
$533_1 = \chi_5$	1	.	.	.	.	.
$533_2 = \chi_6$	.	1	.	.	.	.
$47970_1 = \chi_{34}$	1	.	1	.	.	.
$47970_2 = \chi_{35}$	.	1	.	1	.	.
$388557_1 = \chi_{85}$	.	.	1	.	1	.
$388557_2 = \chi_{86}$	.	.	.	1	.	1
$682240_1 = \chi_{109}$	.	.	.	.	1	1

$$\begin{aligned} \varphi_5 &= 533_1 \\ \varphi_6 &= 533_2 \\ \varphi_{34} &= 47437_1 \\ \varphi_{35} &= 47437_2 \\ \varphi_{75} &= 341120_1 \\ \varphi_{76} &= 341120_2 \end{aligned}$$

Block 18:	φ_{22}	φ_{51}	φ_{107}
$21320_1 = \chi_{22}$	1	.	.
$127920_1 = \chi_{51}$	.	1	.
$575640_1 = \chi_{107}$	1	.	1
$682240_3 = \chi_{111}$	.	1	1
$682240_4 = \chi_{112}$	.	1	1

$$\begin{aligned} \varphi_{22} &= 21320_1 \\ \varphi_{51} &= 127920_1 \\ \varphi_{107} &= 554320_1 \end{aligned}$$