

$O_8^-(2).2 \pmod{5}$

	blocks	defect	matrix		blocks	defect	matrix
$G :$	1	1	5×4		13	0	$1020_2 = \chi_{13,1}, \varphi_{14,1}$
	2	1	5×4		14	0	$1190_1 = \chi_{18,0}, \varphi_{17,0}$
	3	1	5×4		15	0	$1190_2 = \chi_{18,1}, \varphi_{17,1}$
	4	1	5×4		16	0	$2295_1 = \chi_{26,0}, \varphi_{21,0}$
	5	1	5×4		17	0	$2295_2 = \chi_{26,1}, \varphi_{21,1}$
	6	1	5×4		18	0	$4590_1 = \chi_{27+}, \varphi_{22+}$
	7	1	5×4		19	0	$5670_1 = \chi_{29+}, \varphi_{24+}$
	8	1	5×4		20	0	$5670_2 = \chi_{31+}, \varphi_{26+}$
	9	0	$595_1 = \chi_{10,0}, \varphi_{10,0}$		21	0	$4760_1 = \chi_{38,0}, \varphi_{29,0}$
	10	0	$595_2 = \chi_{10,1}, \varphi_{10,1}$		22	0	$4760_2 = \chi_{38,1}, \varphi_{29,1}$
	11	1	5×4		23	0	$5355_1 = \chi_{39,0}, \varphi_{30,0}$
	12	0	$1020_1 = \chi_{13,0}, \varphi_{14,0}$		24	0	$5355_2 = \chi_{39,1}, \varphi_{30,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{5,1}$	$\varphi_{9,1}$	$\varphi_{13,1}$
$1_1 = \chi_{1,0}$	1	.	.	.
$204_4 = \chi_{6,1}$	1	1	.	.
$476_4 = \chi_{9,1}$	.	.	1	.
$1071_4 = \chi_{15,1}$	.	1	.	1
$1344_2 = \chi_{19,1}$	.	.	1	1

$$\begin{aligned}
 \varphi_{1,0} &= 1_1 \\
 \varphi_{5,1} &= 203_2 \\
 \varphi_{9,1} &= 476_2 \\
 \varphi_{13,1} &= 868_2
 \end{aligned}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{5,0}$	$\varphi_{9,0}$	$\varphi_{13,0}$
$1_2 = \chi_{1,1}$	1	.	.	.
$204_3 = \chi_{6,0}$	1	1	.	.
$476_3 = \chi_{9,0}$	.	.	1	.
$1071_3 = \chi_{15,0}$	.	1	.	1
$1344_1 = \chi_{19,0}$	.	.	1	1

$$\begin{aligned}
 \varphi_{1,1} &= 1_2 \\
 \varphi_{5,0} &= 203_1 \\
 \varphi_{9,0} &= 476_1 \\
 \varphi_{13,0} &= 868_1
 \end{aligned}$$

Block 3:	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{18,0}$	$\varphi_{18,1}$
$34_1 = \chi_{2,0}$	1	.	.	.
$34_2 = \chi_{2,1}$	.	1	.	.
$4284_1 = \chi_{21+}$	.	.	1	1
$2176_1 = \chi_{25,0}$	1	.	1	.
$2176_2 = \chi_{25,1}$	.	1	.	1

$$\begin{aligned}
 \varphi_{2,0} &= 34_1 \\
 \varphi_{2,1} &= 34_2 \\
 \varphi_{18,0} &= 2142_1 \\
 \varphi_{18,1} &= 2142_2
 \end{aligned}$$

Block 4:	$\varphi_{3,0}$	$\varphi_{11,0}$	$\varphi_{15,1}$	$\varphi_{20,1}$
$51_1 = \chi_{3,0}$	1	.	.	.
$714_3 = \chi_{12,0}$	1	1	.	.
$1071_2 = \chi_{14,1}$	.	.	1	.
$2856_4 = \chi_{34,1}$	.	1	.	1
$3264_2 = \chi_{35,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{3,0} &= 51_1 \\
\varphi_{11,0} &= 663_1 \\
\varphi_{15,1} &= 1071_2 \\
\varphi_{20,1} &= 2193_2
\end{aligned}$$

Block 5:	$\varphi_{3,1}$	$\varphi_{11,1}$	$\varphi_{15,0}$	$\varphi_{20,0}$
$51_2 = \chi_{3,1}$	1	.	.	.
$714_4 = \chi_{12,1}$	1	1	.	.
$1071_1 = \chi_{14,0}$	.	.	1	.
$2856_3 = \chi_{34,0}$	.	1	.	1
$3264_1 = \chi_{35,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{3,1} &= 51_2 \\
\varphi_{11,1} &= 663_2 \\
\varphi_{15,0} &= 1071_1 \\
\varphi_{20,0} &= 2193_1
\end{aligned}$$

Block 6:	$\varphi_{4,0}$	$\varphi_{6,1}$	$\varphi_{8,0}$	$\varphi_{28,1}$
$84_1 = \chi_{4,0}$	1	.	.	.
$204_2 = \chi_{5,1}$	.	1	.	.
$476_1 = \chi_{8,0}$	1	.	1	.
$4096_2 = \chi_{36,1}$	.	1	.	1
$4284_4 = \chi_{37,1}$	.	.	1	1

$$\begin{aligned}
\varphi_{4,0} &= 84_1 \\
\varphi_{6,1} &= 204_2 \\
\varphi_{8,0} &= 392_1 \\
\varphi_{28,1} &= 3892_2
\end{aligned}$$

Block 7:	$\varphi_{4,1}$	$\varphi_{6,0}$	$\varphi_{8,1}$	$\varphi_{28,0}$
$84_2 = \chi_{4,1}$	1	.	.	.
$204_1 = \chi_{5,0}$	.	1	.	.
$476_2 = \chi_{8,1}$	1	.	1	.
$4096_1 = \chi_{36,0}$	.	1	.	1
$4284_3 = \chi_{37,0}$	.	.	1	1

$$\begin{aligned}
\varphi_{4,1} &= 84_2 \\
\varphi_{6,0} &= 204_1 \\
\varphi_{8,1} &= 392_2 \\
\varphi_{28,0} &= 3892_1
\end{aligned}$$

Block 8:	$\varphi_{7,0}$	$\varphi_{7,1}$	$\varphi_{16,0}$	$\varphi_{16,1}$
$357_1 = \chi_{7,0}$	1	.	.	.
$357_2 = \chi_{7,1}$	.	1	.	.
$2142_1 = \chi_{16+}$	.	.	1	1
$1428_1 = \chi_{20,0}$	1	.	1	.
$1428_2 = \chi_{20,1}$	.	1	.	1

$$\begin{aligned}
\varphi_{7,0} &= 357_1 \\
\varphi_{7,1} &= 357_2 \\
\varphi_{16,0} &= 1071_3 \\
\varphi_{16,1} &= 1071_4
\end{aligned}$$

Block 11:	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{19,0}$	$\varphi_{19,1}$
$714_1 = \chi_{11,0}$	1	.	.	.
$714_2 = \chi_{11,1}$	.	1	.	.
$4284_2 = \chi_{23+}$	.	.	1	1
$2856_1 = \chi_{33,0}$	1	.	1	.
$2856_2 = \chi_{33,1}$	.	1	.	1

$$\begin{aligned} \varphi_{12,0} &= 714_1 \\ \varphi_{12,1} &= 714_2 \\ \varphi_{19,0} &= 2142_3 \\ \varphi_{19,1} &= 2142_4 \end{aligned}$$