S_{10} (mod 3)

	blocks	defect	matrix
$G:$	1	4	22×10
	2	2	9×5
	3	2	9×5
	4	0	$567_1 = \chi_{24,0}, \varphi_{11,0}$
	5	0	$567_2 = \chi_{24,1}, \varphi_{11,1}$
$2.G:$	6	4	12×6
	7	1	3×1

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$	$\varphi_{6,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.
$35_1 = \chi_{3,0}$	1	.	1	.	.	.	.	.	.	.
$35_2 = \chi_{3,1}$	.	1	.	1	.	.	.	.	.	.
$42_1 = \chi_{5,0}$	.	1	.	.	1	.	.	.	.	.
$42_2 = \chi_{5,1}$	1	.	.	.	.	1	.	.	.	.
$75_1 = \chi_{6,0}$	.	.	1	.	1	.	.	.	.	.
$75_2 = \chi_{6,1}$	.	.	.	1	.	1	.	.	.	.
$84_1 = \chi_{7,0}$	.	.	.	.	.	.	1	.	.	.
$84_2 = \chi_{7,1}$	.	.	.	.	.	.	.	1	.	.
$160_1 = \chi_{10,0}$	1	.	1	.	1	.	1	.	.	.
$160_2 = \chi_{10,1}$	.	1	.	1	.	1	.	1	.	.
$210_1 = \chi_{11,0}$	.	1	.	.	1	.	1	1	.	.
$210_2 = \chi_{11,1}$	1	.	.	.	.	1	1	1	.	.
$448_1 = \chi_{12+}$	.	.	.	.	.	.	.	.	1	1
$300_1 = \chi_{17,0}$	.	1	.	1	1	.	.	.	1	.
$300_2 = \chi_{17,1}$	1	.	1	.	.	1	.	.	.	1
$350_1 = \chi_{19,0}$	1	.	.	.	1	.	1	.	1	.
$350_2 = \chi_{19,1}$	.	1	.	.	.	1	.	1	.	1
$768_1 = \chi_{20+}$	1	1	1	1	1	1	1	1	1	1
$525_1 = \chi_{23,0}$	1	1	1	.	1	.	.	.	1	1
$525_2 = \chi_{23,1}$	1	1	.	1	.	1	.	.	1	1

$$
\begin{aligned}
\varphi_{1,0} &= 1_1 & \varphi_{5,1} &= 41_2 \\
\varphi_{1,1} &= 1_2 & \varphi_{6,0} &= 84_1 \\
\varphi_{3,0} &= 34_1 & \varphi_{6,1} &= 84_2 \\
\varphi_{3,1} &= 34_2 & \varphi_{9,0} &= 224_1 \\
\varphi_{5,0} &= 41_1 & \varphi_{9,1} &= 224_2
\end{aligned}
$$

Block 2:	$\varphi_{2,0}$	$\varphi_{4,1}$	$\varphi_{7,0}$	$\varphi_{8,0}$	$\varphi_{10,1}$
$9_1 = \chi_{2,0}$	1	.	.	.	.
$36_2 = \chi_{4,1}$	.	1	.	.	.
$90_1 = \chi_{8,0}$	.	.	1	.	.
$126_1 = \chi_{9,0}$	.	.	.	1	.
$225_1 = \chi_{14,0}$	1	.	1	1	.
$252_1 = \chi_{15,0}$	.	1	1	1	.
$288_2 = \chi_{16,1}$	1	.	.	.	1
$315_2 = \chi_{18,1}$	.	1	.	.	1
$450_2 = \chi_{22,1}$	1	1	.	1	1

$$\varphi_{2,0} = 9_1$$
$$\varphi_{4,1} = 36_2$$
$$\varphi_{7,0} = 90_1$$
$$\varphi_{8,0} = 126_1$$
$$\varphi_{10,1} = 279_2$$

Block 3:	$\varphi_{2,1}$	$\varphi_{4,0}$	$\varphi_{7,1}$	$\varphi_{8,1}$	$\varphi_{10,0}$
$9_2 = \chi_{2,1}$	1	.	.	.	.
$36_1 = \chi_{4,0}$	.	1	.	.	.
$90_2 = \chi_{8,1}$	.	.	1	.	.
$126_2 = \chi_{9,1}$	.	.	.	1	.
$225_2 = \chi_{14,1}$	1	.	1	1	.
$252_2 = \chi_{15,1}$	.	1	1	1	.
$288_1 = \chi_{16,0}$	1	.	.	.	1
$315_1 = \chi_{18,0}$	.	1	.	.	1
$450_1 = \chi_{22,0}$	1	1	.	1	1

$$\varphi_{2,1} = 9_2$$
$$\varphi_{4,0} = 36_1$$
$$\varphi_{7,1} = 90_2$$
$$\varphi_{8,1} = 126_2$$
$$\varphi_{10,0} = 279_1$$

Block 6:	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$	$\varphi_{13,1}$	$\varphi_{16,0}$	$\varphi_{16,1}$
$16_1 = \chi_{25,0}$	1	.	.	.	.	.
$16_2 = \chi_{25,1}$	.	1	.	.	.	.
$96_1 = \chi_{26+}$	.	.	1	1	.	.
$128_1 = \chi_{28+}$	1	1	1	1	.	.
$672_1 = \chi_{32+}$	1	1	.	.	1	1
$768_2 = \chi_{34+}$	1	1	1	1	1	1
$400_1 = \chi_{36,0}$	1	1	1	.	.	1
$400_2 = \chi_{36,1}$	1	1	.	1	1	.
$448_2 = \chi_{38,0}$	1	1	1	1	1	.
$448_3 = \chi_{38,1}$	1	1	1	1	.	1
$800_1 = \chi_{39,0}$	2	2	1	1	1	1
$800_2 = \chi_{39,1}$	2	2	1	1	1	1

$$\varphi_{12,0} = 16_1$$
$$\varphi_{12,1} = 16_2$$
$$\varphi_{13,0} = 48_1$$
$$\varphi_{13,1} = 48_2$$
$$\varphi_{16,0} = 320_1$$
$$\varphi_{16,1} = 320_2$$

Block 7:	φ_{14+}
$432_1 = \chi_{30+}$	1
$432_2 = \chi_{37,0}$	1
$432_3 = \chi_{37,1}$	1

$$\varphi_{14+} = 432_1$$