

$S_9 \pmod{2}$

	blocks	defect	matrix
$2.G :$	1	8	27×5
	2	5	15×3

Block 1:	$\varphi_{1,0}$	φ_{3+}	φ_{5+}	$\varphi_{7,0}$	$\varphi_{9,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.
$42_1 = \chi_{3+}$	2	.	1	.	.
$27_1 = \chi_{5,0}$	1	.	.	1	.
$27_2 = \chi_{5,1}$	1	.	.	1	.
$28_1 = \chi_{6,0}$	2	.	.	1	.
$28_2 = \chi_{6,1}$	2	.	.	1	.
$70_1 = \chi_{7+}$	2	1	.	2	.
$42_2 = \chi_{9,0}$	.	1	.	1	.
$42_3 = \chi_{9,1}$	.	1	.	1	.
$84_1 = \chi_{12,0}$	2	1	1	1	.
$84_2 = \chi_{12,1}$	2	1	1	1	.
$105_1 = \chi_{13,0}$	1	.	.	1	1
$105_2 = \chi_{13,1}$	1	.	.	1	1
$120_1 = \chi_{14,0}$	2	.	1	.	1
$120_2 = \chi_{14,1}$	2	.	1	.	1
$162_1 = \chi_{15,0}$	2	1	1	1	1
$162_2 = \chi_{15,1}$	2	1	1	1	1
$189_1 = \chi_{17,0}$	3	1	1	2	1
$189_2 = \chi_{17,1}$	3	1	1	2	1
$16_1 = \chi_{19+}$	.	1	.	.	.
$56_3 = \chi_{23,0}$	.	1	1	.	.
$56_4 = \chi_{23,1}$	.	1	1	.	.
$112_1 = \chi_{24,0}$	4	1	1	2	.
$112_2 = \chi_{24,1}$	4	1	1	2	.
$240_1 = \chi_{25+}$	4	.	2	.	2
$336_1 = \chi_{28+}$	4	2	1	4	2

$$\begin{aligned}
 \varphi_{1,0} &= 1_1 \\
 \varphi_{3+} &= 16_1 \\
 \varphi_{5+} &= 40_1 \\
 \varphi_{7,0} &= 26_1 \\
 \varphi_{9,0} &= 78_1
 \end{aligned}$$

Block 2:	$\varphi_{2,0}$	$\varphi_{8,0}$	$\varphi_{10,0}$
$8_1 = \chi_{2,0}$	1	.	.
$8_2 = \chi_{2,1}$	1	.	.
$48_1 = \chi_{10,0}$	.	1	.
$48_2 = \chi_{10,1}$	.	1	.
$56_1 = \chi_{11,0}$	1	1	.
$56_2 = \chi_{11,1}$	1	1	.
$168_1 = \chi_{16,0}$	1	.	1
$168_2 = \chi_{16,1}$	1	.	1
$216_1 = \chi_{18,0}$	1	1	1
$216_2 = \chi_{18,1}$	1	1	1
$96_1 = \chi_{21+}$	.	2	.
$160_1 = \chi_{27,0}$	.	.	1
$160_2 = \chi_{27,1}$	.	.	1
$224_1 = \chi_{30,0}$	2	1	1
$224_2 = \chi_{30,1}$	2	1	1

$$\begin{aligned} \varphi_{2,0} &= 8_1 \\ \varphi_{8,0} &= 48_1 \\ \varphi_{10,0} &= 160_1 \end{aligned}$$