

$S_8 \pmod{2}$

	blocks	defect	matrix
$2.G :$	1 2	8 2	27×5 4×1

Block 1:	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	$\varphi_{5,0}$	φ_{6+}
$1_1 = \chi_{1,0}$	1	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.
$7_1 = \chi_{2,0}$	1	.	1	.	.
$7_2 = \chi_{2,1}$	1	.	1	.	.
$14_1 = \chi_{3,0}$	.	1	1	.	.
$14_2 = \chi_{3,1}$	.	1	1	.	.
$20_1 = \chi_{4,0}$	.	.	1	1	.
$20_2 = \chi_{4,1}$	.	.	1	1	.
$21_1 = \chi_{5,0}$	1	.	1	1	.
$21_2 = \chi_{5,1}$	1	.	1	1	.
$42_1 = \chi_{6+}$	2	.	.	.	1
$28_1 = \chi_{8,0}$	.	1	1	1	.
$28_2 = \chi_{8,1}$	.	1	1	1	.
$35_1 = \chi_{9,0}$	1	1	2	1	.
$35_2 = \chi_{9,1}$	1	1	2	1	.
$90_1 = \chi_{10+}$	2	1	2	2	1
$56_1 = \chi_{12,0}$	2	.	.	1	1
$56_2 = \chi_{12,1}$	2	.	.	1	1
$70_1 = \chi_{14,0}$	2	1	1	1	1
$70_2 = \chi_{14,1}$	2	1	1	1	1
$8_1 = \chi_{15,0}$	.	1	.	.	.
$8_2 = \chi_{15,1}$	.	1	.	.	.
$48_1 = \chi_{16+}$	.	1	.	.	1
$48_2 = \chi_{18,0}$	.	1	2	2	.
$48_3 = \chi_{18,1}$	.	1	2	2	.
$112_1 = \chi_{19+}$	4	.	.	2	2
$112_2 = \chi_{21+}$	4	2	4	2	1

$$\begin{aligned}
 \varphi_{1,0} &= 1_1 \\
 \varphi_{2+} &= 8_1 \\
 \varphi_{4,0} &= 6_1 \\
 \varphi_{5,0} &= 14_1 \\
 \varphi_{6+} &= 40_1
 \end{aligned}$$

Block 2:	$\varphi_{8,0}$
$64_1 = \chi_{13,0}$	1
$64_2 = \chi_{13,1}$	1
$64_3 = \chi_{23,0}$	1
$64_4 = \chi_{23,1}$	1

$$\varphi_{8,0} = 64_1$$