

$S_8 \pmod{3}$

	blocks	defect	matrix
$G :$	1	2	9×5
	2	2	9×5
	3	1	3×2
	4	0	$90_1 = \chi_{10+}, \varphi_{7+}$
$2.G :$	5	2	6×4
	6	1	3×1

Block 1:	$\varphi_{1,0}$	$\varphi_{2,1}$	$\varphi_{3,1}$	$\varphi_{5,0}$	$\varphi_{6,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.
$7_2 = \chi_{2,1}$	.	1	.	.	.	$\varphi_{1,0} = 1_1$
$14_2 = \chi_{3,1}$	1	.	1	.	.	$\varphi_{2,1} = 7_2$
$20_2 = \chi_{4,1}$	.	1	1	.	.	$\varphi_{3,1} = 13_2$
$28_1 = \chi_{8,0}$	.	.	.	1	.	$\varphi_{5,0} = 28_1$
$35_1 = \chi_{9,0}$	.	.	.	.	1	$\varphi_{6,0} = 35_1$
$56_2 = \chi_{12,1}$	1	1	1	.	1	
$64_1 = \chi_{13,0}$	1	.	.	1	1	
$70_1 = \chi_{14,0}$	.	1	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{5,1}$	$\varphi_{6,1}$	
$1_2 = \chi_{1,1}$	1	.	.	.	.
$7_1 = \chi_{2,0}$	.	1	.	.	.	$\varphi_{1,1} = 1_2$
$14_1 = \chi_{3,0}$	1	.	1	.	.	$\varphi_{2,0} = 7_1$
$20_1 = \chi_{4,0}$	.	1	1	.	.	$\varphi_{3,0} = 13_1$
$28_2 = \chi_{8,1}$	.	.	.	1	.	$\varphi_{5,1} = 28_2$
$35_2 = \chi_{9,1}$	.	.	.	.	1	$\varphi_{6,1} = 35_2$
$56_1 = \chi_{12,0}$	1	1	1	.	1	
$64_2 = \chi_{13,1}$	1	.	.	1	1	
$70_2 = \chi_{14,1}$	.	1	.	1	1	

Block 3:	$\varphi_{4,0}$	$\varphi_{4,1}$	
$21_1 = \chi_{5,0}$	1	.	$\varphi_{4,0} = 21_1$
$21_2 = \chi_{5,1}$	.	1	$\varphi_{4,1} = 21_2$
$42_1 = \chi_{6+}$	1	1	

Block 5:	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	
$8_1 = \chi_{15,0}$	1	.	.	.	$\varphi_{9,0} = 8_1$
$8_2 = \chi_{15,1}$	.	1	.	.	$\varphi_{9,1} = 8_2$
$112_1 = \chi_{19+}$	1	1	1	1	$\varphi_{12,0} = 48_2$
$112_2 = \chi_{21+}$	1	1	1	1	$\varphi_{12,1} = 48_3$
$64_3 = \chi_{23,0}$	1	1	1	.	
$64_4 = \chi_{23,1}$	1	1	.	1	

Block 6:	φ_{10+}	
$48_1 = \chi_{16+}$	1	$\varphi_{10+} = 48_1$
$48_2 = \chi_{18,0}$	1	
$48_3 = \chi_{18,1}$	1	