

$S_4(4).4 \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	0	$50_1 = \chi_{5,0}, \varphi_{5,0}$
	3	0	$50_2 = \chi_{5,1}, \varphi_{5,1}$
	4	0	$50_3 = \chi_{5,2}, \varphi_{5,2}$
	$5 = \bar{3}$	0	$50_4 = \chi_{5,3}, \varphi_{5,3}$
	6	1	5×4
	7	0	$900_1 = \chi_{17+}, \varphi_{9+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{1,2}$	$\varphi_{1,3}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{2,2}$	$\varphi_{2,3}$	$\varphi_{3,0+}$	$\varphi_{3,1+}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{8,2}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$.	1	.	.	.	.	.	.	.	.	.	.	.
$1_3 = \chi_{1,2}$.	.	1	.	.	.	.	.	.	.	.	.	.
$1_4 = \chi_{1,3}$.	.	.	1	.	.	.	.	.	.	.	.	.
$18_1 = \chi_{2,0}$	1	.	.	.	.	.	.	.	.
$18_2 = \chi_{2,1}$	1	.	.	.	.	.	.	.
$18_3 = \chi_{2,2}$	1	.	.	.	.	.	.
$18_4 = \chi_{2,3}$	1	.	.	.	.	.
$68_1 = \chi_{3,0+}$	1	.	1	.	.	.	.	.	1	.	.	.	.
$68_2 = \chi_{3,1+}$.	1	.	1	.	.	.	.	.	1	.	.	.
$204_1 = \chi_{6+}$	1	1	1	1	1	1	.	.	.
$153_1 = \chi_{12,0}$	1	.	.
$153_2 = \chi_{12,1}$	1	.
$153_3 = \chi_{12,2}$	1
$153_4 = \chi_{12,3}$
$816_1 = \chi_{13+}$	1	1	1	1	1	1	1	1	1
$256_1 = \chi_{25,0}$	1	.	.	.	1	1	.	.	1	.	1	.	.
$256_2 = \chi_{25,1}$.	1	.	.	.	1	1	.	.	1	.	1	.
$256_3 = \chi_{25,2}$.	.	1	.	.	.	1	1	1	.	.	.	1
$256_4 = \chi_{25,3}$.	.	.	1	1	.	.	1	.	1	.	.	.

(Block 1:)	$\varphi_{8,3}$		
$1_1 = \chi_{1,0}$.		
$1_2 = \chi_{1,1}$.		
$1_3 = \chi_{1,2}$.	$\varphi_{1,0} =$	1_1
$1_4 = \chi_{1,3}$.	$\varphi_{1,1} =$	1_2
$18_1 = \chi_{2,0}$.	$\varphi_{1,2} =$	1_3
$18_2 = \chi_{2,1}$.	$\varphi_{1,3} =$	1_4
$18_3 = \chi_{2,2}$.	$\varphi_{2,0} =$	18_1
$18_4 = \chi_{2,3}$.	$\varphi_{2,1} =$	18_2
$68_1 = \chi_{3,0+}$.	$\varphi_{2,2} =$	18_3
$68_2 = \chi_{3,1+}$.	$\varphi_{2,3} =$	18_4
$204_1 = \chi_{6+}$.	$\varphi_{3,0+} =$	66_1
$153_1 = \chi_{12,0}$.	$\varphi_{3,1+} =$	66_2
$153_2 = \chi_{12,1}$.	$\varphi_{8,0} =$	153_1
$153_3 = \chi_{12,2}$.	$\varphi_{8,1} =$	153_2
$153_4 = \chi_{12,3}$	1	$\varphi_{8,2} =$	153_3
$816_1 = \chi_{13+}$	1	$\varphi_{8,3} =$	153_4
$256_1 = \chi_{25,0}$.		
$256_2 = \chi_{25,1}$.		
$256_3 = \chi_{25,2}$.		
$256_4 = \chi_{25,3}$	1		

Block 6:	$\varphi_{6,0+}$	$\varphi_{6,1+}$	$\varphi_{13,0+}$	$\varphi_{13,1+}$		
$170_1 = \chi_{10,0+}$	1	.	.	.	$\varphi_{6,0+} =$	170_1
$170_2 = \chi_{10,1+}$	.	1	.	.	$\varphi_{6,1+} =$	170_2
$1020_1 = \chi_{21+}$	.	.	1	1	$\varphi_{13,0+} =$	510_1
$680_1 = \chi_{26,0+}$	1	.	1	.	$\varphi_{13,1+} =$	510_2
$680_2 = \chi_{26,1+}$	.	1	.	1		