

$S_7 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	0	$14_1 = \chi_{5,0}, \varphi_{4,0}$
	3	0	$14_2 = \chi_{5,1}, \varphi_{4,1}$
	4	0	$14_3 = \chi_{6,0}, \varphi_{5,0}$
	5	0	$14_4 = \chi_{6,1}, \varphi_{5,1}$
	6	0	$21_1 = \chi_{8,0}, \varphi_{6,0}$
	7	0	$21_2 = \chi_{8,1}, \varphi_{6,1}$
	8	0	$35_1 = \chi_{9,0}, \varphi_{7,0}$

	blocks	defect	matrix
	9	0	$35_2 = \chi_{9,1}, \varphi_{7,1}$
$2.G :$	10	1	7×6
	11	0	$28_1 = \chi_{12+}, \varphi_{9+}$
$3.G :$	12	1	5×3
	13	0	$42_1 = \chi_{20+}, \varphi_{16+}$
	14	0	$42_2 = \chi_{21+}, \varphi_{17+}$
$6.G :$	15	1	5×3

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	$\varphi_{1,0} = 1_1$
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	$\varphi_{1,1} = 1_2$
$6_1 = \chi_{2,0}$	1	.	1	.	.	.	$\varphi_{2,0} = 5_1$
$6_2 = \chi_{2,1}$	.	1	.	1	.	.	$\varphi_{2,1} = 5_2$
$20_1 = \chi_{3+}$	.	.	.	.	1	1	$\varphi_{3,0} = 10_1$
$15_1 = \chi_{7,0}$	.	.	1	.	1	.	$\varphi_{3,1} = 10_2$
$15_2 = \chi_{7,1}$	.	.	.	1	.	1	

Block 10:	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$	$\varphi_{12,0}$	$\varphi_{12,1}$	
$8_1 = \chi_{10+}$	1	1	.	.	.	.	$\varphi_{8,0} = 4_1$
$20_2 = \chi_{14,0}$	1	.	.	1	.	.	$\varphi_{8,1} = 4_2$
$20_3 = \chi_{14,1}$	.	1	1	.	.	.	$\varphi_{11,0} = 16_1$
$20_4 = \chi_{15,0}$	.	.	.	.	1	.	$\varphi_{11,1} = 16_2$
$20_5 = \chi_{15,1}$	.	.	.	.	.	1	$\varphi_{12,0} = 20_1$
$36_1 = \chi_{16,0}$	.	.	1	.	.	1	$\varphi_{12,1} = 20_2$
$36_2 = \chi_{16,1}$	.	.	.	1	1	.	

Block 12:	φ_{13+}	φ_{14+}	φ_{15+}	
$12_1 = \chi_{17+}$	1	.	.	$\varphi_{13+} = 12_1$
$30_1 = \chi_{18+}$	.	.	1	$\varphi_{14+} = 18_1$
$30_2 = \chi_{19+}$	1	1	.	$\varphi_{15+} = 30_1$
$48_1 = \chi_{22+}$	.	1	1	
$48_2 = \chi_{23+}$	.	1	1	

Block 15:	φ_{18+}	φ_{19+}	φ_{20+}	
$12_2 = \chi_{24+}$	1	.	.	$\varphi_{18+} = 12_2$
$12_3 = \chi_{25+}$	.	1	.	$\varphi_{19+} = 12_3$
$48_3 = \chi_{26+}$	.	.	1	$\varphi_{20+} = 48_1$
$48_4 = \chi_{27+}$	.	.	1	
$72_1 = \chi_{28+}$	1	1	1	