

$J_3.2 \pmod{19}$

Note:

The decomposition matrices of the defect 1 blocks have been changed in June 2015, due to the correction of a consistency problem concerning the 2- and 19-modular tables; see http://www.math.rwth-aachen.de/~Thomas.Breuer/ctbllib/doc2/chap1.html#generality_problem_J3 for details.

	blocks	defect	matrix
$G :$	1	1	19×18
	2	0	$646_1 = \chi_{4+}, \varphi_{5+}$
	3	0	$1292_1 = \chi_{7+}, \varphi_{7+}$
	4	0	$1140_1 = \chi_{10,0}, \varphi_{12,0}$
	5	0	$1140_2 = \chi_{10,1}, \varphi_{12,1}$
	6	0	$1615_1 = \chi_{13,0}, \varphi_{14,0}$
	7	0	$1615_2 = \chi_{13,1}, \varphi_{14,1}$
	8	0	$3876_1 = \chi_{17+}, \varphi_{16+}$
	9	0	$2432_1 = \chi_{19,0}, \varphi_{18,0}$
	10	0	$2432_2 = \chi_{19,1}, \varphi_{18,1}$

	blocks	defect	matrix
	11	0	$3078_1 = \chi_{21,0}, \varphi_{19,0}$
	12	0	$3078_2 = \chi_{21,1}, \varphi_{19,1}$
$3.G :$	13	1	11×9
	14	0	$342_1 = \chi_{26+}, \varphi_{24+}$
	15	0	$342_2 = \chi_{27+}, \varphi_{25+}$
	$16 = \overline{15}$	0	$342_3 = \chi_{28+}, \varphi_{26+}$
	17	0	$5472_1 = \chi_{34+}, \varphi_{32+}$
	18	0	$5814_1 = \chi_{36+}, \varphi_{33+}$
	19	0	$6156_1 = \chi_{38+}, \varphi_{34+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$.	1	.	.	.	.	.	.	.	.	.	.	.
$170_1 = \chi_{2+}$.	.	1	1	.	.	.	.	.	.	.	.	.
$324_1 = \chi_{6,0}$	1	.	1	.	.	.	.	.	.
$324_2 = \chi_{6,1}$	1	.	1	.	.	.	.	.
$816_1 = \chi_{9,0}$	1	.	.	1	.	.	.	.
$816_2 = \chi_{9,1}$	1	.	.	.	.	1	.	.	.
$1215_1 = \chi_{11,0}$	1	.	.	.	.	.	.
$1215_2 = \chi_{11,1}$	1	.	.	.	.	1
$1215_3 = \chi_{12,0}$.	1	.	.	.	.	.	.	.	.	.	.	.
$1215_4 = \chi_{12,1}$	1	.	.	.	.	.	.	.	.	.	.	.	.
$1920_1 = \chi_{14,0}$	1	.	1
$1920_2 = \chi_{14,1}$	1	.
$1920_3 = \chi_{15,0}$	1	.	.	.	.
$1920_4 = \chi_{15,1}$	1	.	.	.
$1920_5 = \chi_{16,0}$.	.	1	.	.	.	.	.	.	.	.	.	.
$1920_6 = \chi_{16,1}$.	.	.	1	.	.	.	.	.	.	.	.	.
$2754_1 = \chi_{20,0}$	1	.
$2754_2 = \chi_{20,1}$	1	.	.

(Block 1:)	$\varphi_{11,1}$	$\varphi_{13,0}$	$\varphi_{13,1}$	$\varphi_{15,0}$	$\varphi_{15,1}$		
$1_1 = \chi_{1,0}$	$\varphi_{1,0} = 1_1$	
$1_2 = \chi_{1,1}$	$\varphi_{1,1} = 1_2$	
$170_1 = \chi_{2+}$	$\varphi_{2,0} = 85_1$	
$324_1 = \chi_{6,0}$	$\varphi_{2,1} = 85_2$	
$324_2 = \chi_{6,1}$	$\varphi_{3,0} = 110_1$	
$816_1 = \chi_{9,0}$	$\varphi_{3,1} = 110_2$	
$816_2 = \chi_{9,1}$	$\varphi_{4,0} = 214_1$	
$1215_1 = \chi_{11,0}$	1	.	.	.	.	$\varphi_{4,1} = 214_2$	
$1215_2 = \chi_{11,1}$	$\varphi_{9,0} = 706_1$	
$1215_3 = \chi_{12,0}$.	1	.	.	.	$\varphi_{9,1} = 706_2$	
$1215_4 = \chi_{12,1}$.	.	1	.	.	$\varphi_{10,0} = 919_1$	
$1920_1 = \chi_{14,0}$	$\varphi_{10,1} = 919_2$	
$1920_2 = \chi_{14,1}$	1	.	.	.	.	$\varphi_{11,0} = 1001_1$	
$1920_3 = \chi_{15,0}$.	1	.	.	.	$\varphi_{11,1} = 1001_2$	
$1920_4 = \chi_{15,1}$.	.	1	.	.	$\varphi_{13,0} = 1214_1$	
$1920_5 = \chi_{16,0}$.	.	.	1	.	$\varphi_{13,1} = 1214_2$	
$1920_6 = \chi_{16,1}$	1	$\varphi_{15,0} = 1835_1$	
$2754_1 = \chi_{20,0}$.	.	.	1	.	$\varphi_{15,1} = 1835_2$	
$2754_2 = \chi_{20,1}$	1		

Block 13:	φ_{20+}	φ_{21+}	φ_{22+}	φ_{23+}	φ_{27+}	φ_{28+}	φ_{29+}	φ_{30+}	φ_{31+}
$36_1 = \chi_{22+}$	1	.	.	.	.	.	.	.	.
$36_2 = \chi_{23+}$.	1	.	.	.	.	.	.	.
$306_1 = \chi_{24+}$.	.	1	.	.	.	.	.	.
$306_2 = \chi_{25+}$.	.	.	1	.	.	.	.	.
$648_1 = \chi_{29+}$	1	.	.	.	.
$2430_1 = \chi_{30+}$	1	.
$2430_2 = \chi_{31+}$	1	.	1	.	.
$3060_1 = \chi_{32+}$	1	1	.	.
$3060_2 = \chi_{33+}$	1	1	.	.
$5508_1 = \chi_{35+}$.	.	1	1	.	1	.	.	1
$6120_1 = \chi_{37+}$	1	1	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{20+} = 36_1 & \varphi_{28+} = 1278_1 \\
\varphi_{21+} = 36_2 & \varphi_{29+} = 1782_1 \\
\varphi_{22+} = 306_1 & \varphi_{30+} = 2430_1 \\
\varphi_{23+} = 306_2 & \varphi_{31+} = 3618_1 \\
\varphi_{27+} = 648_1 &
\end{array}$$