Co_3 (mod 3)

	blocks	defect	matrix
$G:$	1	7	39×20
	2	1	3×2

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$23_1 = \chi_2$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$253_1 = \chi_3$	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.
$253_2 = \chi_4$	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.
$275_1 = \chi_5$	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.
$896_1 = \chi_6$	.	.	1	.	.	.	.	1	.	.	.	.	.	.	.
$896_2 = \chi_7$	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.
$1771_1 = \chi_8$	.	.	.	.	1	.	1	1	.	.	.	.	.	.	.
$2024_1 = \chi_9$	1	2	1	1	.	.	.	.	1	.	.	.	.	.	.
$3520_1 = \chi_{10}$	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.
$3520_2 = \chi_{11}$	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
$4025_1 = \chi_{12}$	.	2	1	1	1	1	1	1	1	.	.	.	.	.	.
$5544_1 = \chi_{13}$	.	2	1	1	1	1	.	.	.	.	.	1	.	.	.
$7084_1 = \chi_{14}$	.	.	.	.	.	.	1	1	.	.	.	.	1	.	.
$8855_1 = \chi_{15}$	2	2	1	1	.	.	.	.	1	.	.	.	.	1	.
$9625_1 = \chi_{16}$	1	1	.	.	1	.	.	.	1	.	.	.	.	.	1
$9625_2 = \chi_{17}$	1	1	.	.	1	.	.	.	1	.	.	.	.	.	.
$20608_1 = \chi_{18}$	1	2	1	.	1	1	1	2	1	1	.	.	1	.	.
$20608_2 = \chi_{19}$	1	2	.	1	1	1	2	1	1	.	1	.	1	.	1
$23000_1 = \chi_{20}$	1	3	2	2	1	1	2	2	1	.	.	1	1	1	.
$26082_1 = \chi_{21}$	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$31625_1 = \chi_{22}$	1	2	1	1	1	1	1	1	1	1	1	.	.	.	.
$31625_2 = \chi_{23}$	2	1	.	.	1	1	2	2	1	1	1	.	1	.	1
$31625_3 = \chi_{24}$	.	3	1	1	3	2	1	1	1	.	.	1	.	.	.
$31878_1 = \chi_{25}$	2	4	1	1	3	1	1	1	2	.	.	1	1	.	1
$40250_1 = \chi_{26}$	.	2	1	1	1	2	2	2	.	.	.	1	1	.	.
$57960_1 = \chi_{27}$	2	2	1	1	1	1	2	2	1	.	.	1	1	.	.
$63250_1 = \chi_{28}$	3	3	1	1	2	2	3	3	2	2	2	.	1	.	1
$73600_1 = \chi_{29}$	1	2	1	1	.	1	2	2	1	.	.	.	1	1	.
$80960_1 = \chi_{30}$	2	2	1	1	1	3	6	6	1	2	2	.	3	.	1
$129536_1 = \chi_{33}$	2	2	1	1	.	3	5	5	1	2	2	.	2	.	1
$129536_2 = \chi_{34}$	4	6	2	2	4	3	4	4	3	1	1	1	1	1	1
$177100_1 = \chi_{35}$	4	7	3	3	3	5	7	7	3	2	2	1	3	1	1
$221375_1 = \chi_{37}$	8	11	4	4	7	5	8	8	6	2	2	2	3	1	2
$226688_1 = \chi_{38}$	7	10	3	3	6	7	10	10	5	4	4	1	4	.	3
$246400_1 = \chi_{39}$	8	11	5	5	5	7	12	12	5	3	3	2	5	1	2
$249480_1 = \chi_{40}$	5	8	4	4	4	8	13	13	3	4	4	1	6	.	2
$253000_1 = \chi_{41}$	8	10	4	4	4	8	13	13	5	4	4	1	6	1	3
$255024_1 = \chi_{42}$	8	9	3	3	5	7	12	12	5	4	4	1	5	.	3

(**Block 1:**)	φ_{16}	φ_{17}	φ_{18}	φ_{19}	φ_{20}
$1_1 = \chi_1$	.	.	.	.	.
$23_1 = \chi_2$	.	.	.	.	.
$253_1 = \chi_3$	.	.	.	.	.
$253_2 = \chi_4$	.	.	.	.	.
$275_1 = \chi_5$	.	.	.	.	.
$896_1 = \chi_6$	.	.	.	.	.
$896_2 = \chi_7$	.	.	.	.	.
$1771_1 = \chi_8$	.	.	.	.	.
$2024_1 = \chi_9$	.	.	.	.	.
$3520_1 = \chi_{10}$	.	.	.	.	.
$3520_2 = \chi_{11}$	.	.	.	.	.
$4025_1 = \chi_{12}$	.	.	.	.	.
$5544_1 = \chi_{13}$	.	.	.	.	.
$7084_1 = \chi_{14}$	.	.	.	.	.
$8855_1 = \chi_{15}$	.	.	.	.	.
$9625_1 = \chi_{16}$	.	.	.	.	.
$9625_2 = \chi_{17}$	1	.	.	.	.
$20608_1 = \chi_{18}$	1	.	.	.	.
$20608_2 = \chi_{19}$	.	.	.	.	.
$23000_1 = \chi_{20}$	.	.	.	.	.
$26082_1 = \chi_{21}$	.	.	1	.	.
$31625_1 = \chi_{22}$	.	1	.	.	.
$31625_2 = \chi_{23}$	1	.	.	.	.
$31625_3 = \chi_{24}$	.	1	.	.	.
$31878_1 = \chi_{25}$	1	.	.	.	.
$40250_1 = \chi_{26}$	.	.	1	.	.
$57960_1 = \chi_{27}$	.	.	.	1	.
$63250_1 = \chi_{28}$	1	1	.	.	.
$73600_1 = \chi_{29}$	.	.	.	.	1
$80960_1 = \chi_{30}$	1	.	1	.	.
$129536_1 = \chi_{33}$	1	.	1	.	1
$129536_2 = \chi_{34}$	1	1	.	.	1
$177100_1 = \chi_{35}$	1	1	1	.	1
$221375_1 = \chi_{37}$	2	1	.	1	1
$226688_1 = \chi_{38}$	3	1	1	.	1
$246400_1 = \chi_{39}$	2	.	1	1	1
$249480_1 = \chi_{40}$	2	1	2	.	1
$253000_1 = \chi_{41}$	3	.	2	.	1
$255024_1 = \chi_{42}$	3	.	1	1	1

$\varphi_1 = 1_1$
$\varphi_2 = 22_1$
$\varphi_3 = 126_1$
$\varphi_4 = 126_2$
$\varphi_5 = 231_1$
$\varphi_6 = 231_2$
$\varphi_7 = 770_1$
$\varphi_8 = 770_2$
$\varphi_9 = 1727_1$
$\varphi_{10} = 2750_1$
$\varphi_{11} = 2750_2$
$\varphi_{12} = 4786_1$
$\varphi_{13} = 5544_1$
$\varphi_{14} = 6830_1$
$\varphi_{15} = 7644_1$
$\varphi_{16} = 7644_2$
$\varphi_{17} = 22099_1$
$\varphi_{18} = 25851_1$
$\varphi_{19} = 42063_1$
$\varphi_{20} = 55891_1$

Block 2:	φ_{21}	φ_{22}
$91125_1 = \chi_{31}$	1	.
$93312_1 = \chi_{32}$	.	1
$184437_1 = \chi_{36}$	1	1

$$\begin{aligned} \varphi_{21} &= 91125_1 \\ \varphi_{22} &= 93312_1 \end{aligned}$$