

# BRIEF BASIC RECOMMENDATION FOR LINEAR BAR CODES

All recommendations are based on basic information of System Gs1.

( Other information and recommendations you can find on: [www.gs1.org](http://www.gs1.org) )

**Diversity of colors:** The contrast between the background and code is important. The best- black code on the white background. Shade of the code cannot be lighter than shade of the background. Code cannot be inversed. Code has to be in one color, it cannot be assembled from more colors (CMYK). Inappropriate colors for codes are yellow, red, orange and light green (It is impossible to read them by scanner, but it is possible to use those colors as the background).The background must be bright, preferable in one color, no images even lightened.

**Graphics:** Code should be in vectors. Grid code must be in high resolution.

**Size:** Code has to be in required size and in define possibilities of dimension. The safe zone around the code must be observed. Lowering of height reduce the readability/legibility of code and lengthen the time of scanning.

**Table of sizes and dimensions  
selected symbols  
(including safety zones)**

size in %	EAN-8		EAN-13	
	width in mm	height in mm	width in mm	height in mm
50	-	-	-	-
70	-	-	-	-
80	21,38	17,31	29,83	21,00
85	22,72	18,39	31,69	22,31
90	24,05	19,47	33,56	23,63
95	25,39	20,56	35,42	24,94
100	26,73	21,64	37,29	26,26
105	28,07	22,72	39,15	27,57
110	29,40	23,80	41,02	28,89
115	30,74	24,89	42,88	30,20
120	32,08	25,97	44,75	31,51
125	33,41	27,05	46,61	32,83
130	34,75	28,13	48,48	34,14
135	36,09	29,21	50,34	35,45
140	37,42	30,30	52,21	36,76
145	38,76	31,38	54,07	38,08
150	40,10	32,46	55,94	39,39
155	41,43	33,54	57,80	40,70
160	42,77	34,62	59,66	42,02
165	44,10	35,71	61,53	43,33
170	45,44	36,79	63,39	44,64
175	46,78	37,87	65,26	45,96
180	48,11	38,95	67,12	47,27
185	49,45	40,03	68,99	48,58
190	50,79	41,12	70,85	49,89
200	53,46	43,28	74,58	52,52

**In case of default of relevant recommendations the problem –free readability/legibility of the code is not guaranteed. Test of the compliance of those recommendations is not a part of standard processing of delivered print data.**