BD disposable hypodermic needles

Technical data sheet

	Outside diameter (inches)		Inside diameter (inches)		Wall thickness (inches)*		Outside diameter (mm)		Inside diameter (mm)		Wall thickness (mm)*	
Gauge description	min	max	min	max	min	max	min	max	min	max	min	max
18 G reg. wall	0.0495	0.0505	0.0315	0.0345	0.0080	0.0090	1.26	1.28	0.80	0.88	0.20	0.23
18 G thin wall	0.0495	0.0505	0.0365	0.0395	0.0055	0.0065	1.26	1.28	0.93	1.00	0.14	0.17
19 G reg. wall	0.0420	0.0430	0.0255	0.0285	0.00725	0.00825	1.07	1.09	0.65	0.72	0.18	0.21
19 G thin wall	0.0420	0.0430	0.0295	0.0330	0.0050	0.00625	1.07	1.09	0.75	0.84	0.13	0.16
20 G reg. wall	0.0355	0.0360	0.0230	0.0250	0.0055	0.00625	0.90	0.91	0.58	0.64	0.14	0.16
20 G thin wall	0.0355	0.0360	0.0250	0.0270	0.0045	0.00525	0.90	0.91	0.64	0.69	0.11	0.13
21 G reg. wall	0.0320	0.0325	0.0195	0.0215	0.0055	0.00625	0.81	0.83	0.50	0.55	0.14	0.16
21 G thin wall	0.0320	0.0325	0.0215	0.0235	0.0045	0.00525	0.81	0.83	0.55	0.60	0.11	0.13
22 G reg. wall	0.0280	0.0285	0.0155	0.0175	0.0055	0.00625	0.71	0.72	0.39	0.44	0.14	0.16
22 G thin wall	0.0280	0.0285	0.0175	0.0195	0.0045	0.00525	0.71	0.72	0.44	0.50	0.11	0.13
23 G reg. wall	0.0250	0.0255	0.0125	0.0145	0.0055	0.00625	0.64	0.65	0.32	0.37	0.14	0.16
23 G thin wall	0.0250	0.0255	0.0145	0.0165	0.0045	0.00525	0.64	0.65	0.37	0.42	0.11	0.13
24 G reg. wall	0.0220	0.0225	0.0115	0.0135	0.0045	0.00525	0.56	0.57	0.29	0.34	0.11	0.13
24 G thin wall	0.0220	0.0225	0.0135	0.0155	0.0035	0.00425	0.56	0.57	0.34	0.39	0.09	0.11
25 G reg. wall	0.0200	0.0205	0.0095	0.0115	0.0045	0.00525	0.51	0.52	0.24	0.29	0.11	0.13
25 G thin wall	0.0200	0.0205	0.0115	0.0135	0.0035	0.00425	0.51	0.52	0.29	0.34	0.09	0.11
26 G reg. wall	0.0180	0.0185	0.0095	0.0115	0.0035	0.00425	0.46	0.47	0.24	0.29	0.09	0.11
27 G reg. wall	0.0160	0.0165	0.0075	0.0095	0.0035	0.00425	0.41	0.42	0.19	0.24	0.09	0.11
28 G reg. wall	0.0140	0.0145	0.0065	0.0080	0.00325	0.00375	0.36	0.37	0.17	0.20	0.08	0.10
29 G reg. wall	0.0130	0.0135	0.0065	0.0080	0.00275	0.00325	0.33	0.34	0.17	0.20	0.07	0.08
30 G reg. wall	0.0120	0.0125	0.0055	0.0070	0.00275	0.00325	0.30	0.32	0.14	0.18	0.07	0.08

Conversion factors: mm to in multiply by 0.03937; in to mm multiply by 25.4

Material information

Needle hub ..... color-coded, polypropylene
Needle shield ..... polypropylene
Bonding agent ..... epoxy, acrylic
Lubricant ..... medical grade silicone
Needle ..... type 304 stainless steel

Composition of type 304 stainless steel wt. (%)

Chromium 18–20
Nickel 8–12
Manganese 2.0
Silicon 1.0
Phosphorus 0.045
Sulfur 0.03
Carbon 0.08
Iron ..... balance

BD needles are not formulated with the following elements:
DEHP, BPA†, natural rubber latex, BSE / TSE‡

Standards information

ISO 7864**: 1993 sterile hypodermic needles for single use
ISO 9626: 1995 stainless steel tubing for manufacture of medical devices
ISO 15510: 2014 stainless steels chemical composition

Unit packaging

BD conventional needles use a paper based top web and co-extruded film bottom web.

BD sharps safety needles use a nylon film top web and a polyester bottom web.

Packaging information for conventional needles

	1 inch or less	1 ¼ - 1 ½ inch
Shelf box dimensions	4.5" L × 3.375" W × 3.25" H	4.5" L × 3.375" W × 3.75" H
Case dimensions	17.813" L × 7.125" W × 5.063" H	17.813" L × 8.125" W × 5.063" H
Approximate weight	3.7 lb.	4.5 lb.
Cube	0.37 cu. ft.	0.42 cu. ft.

*For reference only.
**Certain BD conventional needle hubs do not align with the ISO color standard
†BPA is a building block in a raw material of the adhesive. The quantity of BPA in the final adhesive will be below a de minimis concentration and have no demonstrable clinically significant exposure or toxicity.
‡The raw materials used in the manufacture of these devices do not contain any animal tissue but may contain very small amounts of animal-derived raw materials. These products are manufactured using polymer resins which may contain very small amounts of surfactants or fatty acids derived from tallow. Our resin suppliers have confirmed that these tallow derived materials have been produced using multiple cycles of conditions at least as rigorous (and normally more rigorous) as those specified in Annex C.5 of EN ISO 22442-1. Therefore, the raw materials meet or exceed the requirements of EN ISO 22442-1. Based upon this information, these products are considered not to present any risk with respect to TSE or other animal borne diseases.

bd.com