

# Technical data sheet for empty hard capsules Of vegetable origin

## General Parameters

**Description:** Are manufactured with Pharmaceutical grade HPMC. Empty, two-piece, odourless and tasteless and suitable for human consumption.

**Manufacturer:** CapsulCN International Co., Ltd

**Legal Status:** are formulated using approved and officially certified dyes and pigments for Food, Drugs and Cosmetics (FD & C), and / or for Drugs and Cosmetics (D & C) and / or EU legislation for food supplements

**Country of Origin:** China

**Composition:** Hydroxypropyl methyl cellulose (HPMC, E-464 & USP) and water. Raw materials meet all requirements of the USP & EP.

**Color range:** Clear transparent and opaque, with colors according to agreement.

**Imprint:** The components of the printing inks are manufactured in compliance with 21 CFR.

**Ink type:** Edible

**Organic Food Supplements:** Hard capsules prepared from HPMC (E-464), carrageenan (E-407), and water are permitted for preparation of non-animal based food supplements labelled as organic. (Source: Commissions Regulation No. 889/2008/EC, Article 27 and Annex VIII)

**Shelf Life:** have an expiration date of five years from the manufacturing date, provided they are stored and handled in their original packaging, in places with temperatures between 59°F (15°C) and 86°F (30°C), and relative humidity levels between 35% and 70%.

Empty Hard HPMC Vegetable Capsules are soluble in water.

Empty Hard HPMC Vegetable Capsules disintegrate in less than 15 minutes.

Empty Hard HPMC Vegetable Capsules are moisture content is kept between 4%and 8%

Empty capsules weight	
Size	Capsule weight (mg)
000	160.0±12
00	139.0±7
0	109.0±6
1	80.0±5
2	63.0±4
3	50.0±3
4	40.0±3

The specifications limits are for the average capsule weight. Depending on the size, the body represents approximately 60% of the total capsule weight.

#### Individual lengths

Size	CAP		BODY	
	(mm)	(inches)	(mm)	(inches)
000	12.90 ± 0.35	0.508 ± 0.014	21.90 ± 0.35	0.862 ± 0.014
00	11.80 ± 0.35	0.464 ± 0.014	20.10 ± 0.35	0.791 ± 0.014
0	10.85 ± 0.35	0.427 ± 0.014	18.35 ± 0.35	0.722 ± 0.014
1	9.85 ± 0.35	0.388 ± 0.014	16.40 ± 0.35	0.645 ± 0.014
2	8.80 ± 0.35	0.346 ± 0.014	15.15 ± 0.35	0.596 ± 0.014
3	8.00 ± 0.35	0.315 ± 0.014	13.45 ± 0.35	0.529 ± 0.014
4	7.20 ± 0.35	0.283 ± 0.014	12.10 ± 0.35	0.476 ± 0.014

These parameters are only for in-process control purposes and are not acceptance/rejection criteria.

#### Joining lengths of the locked capsules

Size	Closed capsule	
	(mm)	(inches)
000	27.80 ± 0.50	1.094 ± 0.019
00	23.40 ± 0.30	0.921 ± 0.012
0	21.60 ± 0.30	0.850 ± 0.012
1	19.40 ± 0.30	0.764 ± 0.012
2	17.60 ± 0.30	0.693 ± 0.012
3	15.70 ± 0.30	0.618 ± 0.012
4	14.30 ± 0.30	0.563 ± 0.012

The joining lengths of the locked capsules can vary with fill material and filling machine adjustment.  
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#### External diameter

Size	CAP		BODY	
	(mm)	(inches)	(mm)	(inches)
000	9.94	0.391	9.55	0.376
00	8.56	0.337	8.23	0.324
0	7.65	0.301	7.35	0.289
1	6.96	0.274	6.63	0.261
2	6.39	0.252	6.12	0.241
3	5.85	0.230	5.60	0.220
4	5.33	0.210	5.08	0.200

These parameters are only for in-process control purposes and are not acceptance/rejection criteria.

Approximate content of the filled capsule (mg)

Size	Density			
	0.6 g/ml	0.8 g/ml	1.0 g/ml	1.2 g/ml
000	822	1,096	1,370	1,644
00	570	760	950	1.140
0	408	544	680	816
1	288	384	480	576
2	216	288	360	432
3	162	216	270	324
4	120	160	200	240

Packaging standards for empty hard capsules of vegetable origin

Size	Quantity (Capsules / box)
000	50.000
00	75.000
0	100.000
1	120.000
2	180.000
3	250.000
4	300.000

Note: As specifications are under continuous review, be sure to contact your sales representative for the most up-to-date technical information.