

## Compact by Design Category Thresholds and Additional Information

### Contents include:

1. Compact by Design category thresholds
2. Compact by Design example calculations
3. Calculating unit efficiency for concentrated products

### 1. Compact by Design category thresholds

Category Name	"Unit" unit of measure	Threshold Value
AC Filters	count	7.441235476
Air Purifier Filters	count	18.3223109
Allergy Relief	count	0.000029266
Antacids	count	0.000133898
Astringent Powders	ounce	0.205795918
Baby Cereal	ounce	0.502928983
Baby Wipes	count	0.016200947
Baking Cups	count	0.000854144
Baking Mix	ounce	0.215466118
Bandages	count	0.001535113
Body Scrub	fl_oz	0.126299996
Breakfast Cereal	ounce	0.364682835
Bronzer and Blush Powder	ounce	3.133473908
Calcium Supplement	count	0.000362695
Cell Phone Cables	count	0.294286968
Cellphone Data Cables	count	0.145560723
Children's Vitamins	count	0.000318177
Cold and Flu Remedies	count	0.000328231
Computer Lightning Cables	count	0.352973112
Computer USB Cables	count	0.589240465
Conditioner	fl_oz	0.17129922
Conditioner Bars	ounce	1.71438596
Conditioning Shampoo Bars	oz	4.673587214
Conditioning Shampoos	fl_oz	0.167178615
Cosmetic Powder	ounce	1.154225183
Cough Drops	count	0.001397466
Cough Syrup	fl_oz	0.198584487
Crackers	ounce	0.60009587
Dehydrated Pet Food	ounce	1.674722964

Dishwasher Detergent Pods and Tabs	count	0.070117164
Dry Pet Food	pound	58.27831539
Eczema Relief	oz	0.215276367
Essential Oils	fl_oz	0.91774359
Facial Astringents	fl_oz	0.169761131
Facial Cleansing Pads	count	0.000527312
Facial Cleansing Wipes	count	0.003895535
Facial Mask Powder	ounce	0.201881414
Facial Tissue	count	0.000596738
Flavored Drink Concentrate	fl_oz	0.002465635
Floor Cleaners	fl_oz	0.182126543
Foot Mask	count	0.610080294
Household Glass Cleaners	fl_oz	0.199083576
Hair Coloring Agent	fl_oz	0.153006451
Hair Gels and Creams	ounce	0.200122346
Hair Removal Wax	ounce	0.156252909
HDMI Cables	count	2.038132196
HEPA Air Filters	count	18.3223109
Honey	ounce	0.112367644
Household Cleaning Wipes	count	0.024265392
Iron Supplement	count	0.000102673
Jerky	ounce	0.32656617
Kitchen Trash Bags	count	0.05664354
Laundry Detergent	loads	0.095495635
Lip Balm	count	0.02837219
Lip Color	ounce	1.715162747
Liquid Bathroom Cleaners	fl_oz	0.197507565
Liquid Bronzer and Blush	fl_oz	0.311364368
Liquid Dishwasher Detergent	fl_oz	0.170107593
Household Liquid Multipurpose Cleaners	fl_oz	0.003185087
Liquid Soap	fl_oz	0.207686259
Liquid Stitches and Bandages	fl_oz	0.419249847
Liquid Sunscreen	fl_oz	0.230160209
Loose Leaf Tea	ounce	0.278788756
Magnesium Supplement	count	0.000339248
Mascara	fl_oz	0.850219466
Moisturizing Lotion	fl_oz	0.179692419
Moisturizing Lotion Bars/Moisturizing Creams	ounce	0.201275982

Mouthwash	fl_oz	0.177328247
Multivitamins	count	0.000512606
Nuts and Seeds	ounce	0.250317043
Pain Medication	count	0.000059613
Panty Liners	count	0.003081933
Paper Towels	count	0.008590416
Pasta and Noodles	ounce	0.214586389
Personal Cleaning Wipes	count	0.002089005
Pet Shampoo	fl_oz	0.158838889
Pet Treats	ounce	0.345855902
Pet Waste Bags	count	0.000424351
Pitcher Water Filters	count	14.43952315
Popcorn	ounce	0.214391661
Powdered Dishwasher Detergent	ounce	0.117094237
Probiotic Supplement	count	0.000402861
Roll-on Deodorant	fl_oz	0.203057476
Sanitary Napkins	count	0.01389496
Shampoo	fl_oz	0.184505427
Shampoo Bars	ounce	0.363322636
Small Trash Bags	count	0.002290142
Snack Food Bars	count	0.762063521
Soap Bars and Powders	ounce	0.127204379
Solid Deodorant	ounce	0.281085276
Sunscreen Bars	ounce	0.260603429
Tea Bags	count	0.009888123
Toilet Paper	sheets	0.000183663
Tooth Whiteners	count	0.010619093
Toothpaste	ounce	0.235559095
Toothpaste Capsules	count	0.004530731
Vinegar	fl_oz	0.225719904
Vitamin B	count	0.00009711
Vitamin C	count	0.000315693
Vitamin D	count	0.000050488
Vitamin E	count	0.000051524
Wax Strips	count	0.00109653
Wet Pet Food	ounce	0.194355963
Whole Bean, Ground, and Instant Coffee	ounce	0.303711531
Zinc Supplement	count	0.000106899

## 2. Compact by Design example calculations

### Example A. Liquid Shampoo Bottle

Dimensions: 3 inches X 2 inches X 12 inches

Weight: 1.2 pounds

Unit: 20 fl. oz.

$$\left( \frac{3 \text{ inches} \times 2 \text{ inches} \times 12 \text{ inches}}{20 \text{ fl. oz.}} \right) \times \left( \frac{1.2 \text{ pounds}}{20 \text{ fl. oz.}} \right) = 0.216$$

0.216 = unit efficiency

Shampoo threshold (fl. oz.) = 0.184505427

0.216 > 0.184505427, so Example A. is not Compact by Design

### Example B. Vitamin B

Dimensions: 1.5 inches X 1.5 inches X 3.5 inches

Weight: 0.05 pounds

Unit: 100 count

$$\left( \frac{1.5 \text{ inches} \times 1.5 \text{ inches} \times 3.5 \text{ inches}}{100 \text{ count}} \right) \times \left( \frac{0.05 \text{ pounds}}{100 \text{ count}} \right) = 0.000039375$$

0.000039375 = unit efficiency

Vitamin B threshold (count) = 0.00009711

0.000039375 < 0.00009711, so Example B. is Compact by Design

### Example C. Laundry Detergent

Dimensions: 4.9 inches X 8.6 inches X 12.9 inches

Weight: 7.5 pounds

Unit: 128 loads

$$\left( \frac{4.9 \text{ inches} \times 8.6 \text{ inches} \times 12.9 \text{ inches}}{128 \text{ loads}} \right) \times \left( \frac{7.5 \text{ pounds}}{128 \text{ loads}} \right) = 0.248843079$$

0.248843079 = unit efficiency

Laundry detergent threshold (loads) = 0.095495635

0.248843079 > 0.095495635, so Example C. is not Compact by Design

### 3. Calculating Unit Efficiency for concentrated products

For concentrated products such as concentrated cleaners, where a customer has to add water prior to use, we determine the number of units using the product's "equivalent product volume." Equivalent product volume represents the total "usable" volume of the product when un-concentrated or mixed with the appropriate amount of liquid. Equivalent product volume is used in place of "unit" in the denominator of our efficiency equation. This value can be updated in Seller Central or Vendor Central.

#### Equivalent Product Volume Calculation:

**Product A:** 32 fl. oz. concentrated cleaner.

Instructions are to dilute 2 fl. oz. of the cleaner with 1 gal (128 fl. oz.) of water before using.

Determine volume of each customer use:

$$(2 \text{ fl. oz. cleaner}) + (128 \text{ fl. oz. water}) = 130 \text{ fl. oz.} \\ = \text{total volume for 1 customer use}$$

Determine the total volume of customer uses in product (equivalent product volume):

$$\left( \frac{32 \text{ fl. oz. cleaner}}{1} \right) \times \left( \frac{1 \text{ customer use}}{2 \text{ fl. oz. cleaner}} \right) \times \left( \frac{130 \text{ fl. oz.}}{1 \text{ customer use}} \right) \\ = 2,080 \text{ fl. oz. equivalent product vol.}$$

Use equivalent product volume in unit efficiency calculation:

$$\left( \frac{\text{Length} \times \text{Width} \times \text{Height}}{2,080 \text{ fl. oz.}} \right) \times \left( \frac{\text{Weight}}{2,080 \text{ fl. oz.}} \right) = \text{unit efficiency}$$