

Compact by Design Category Thresholds and Additional Information

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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
Animal Fur Cleaner and Conditioner	fl oz	0.15409171
Animal Nutrition Supplement	count	0.0006327547
Animal Nutrition Supplement	fl oz	0.2255132097
Animal Nutrition Supplement	ounce	0.2050567824
Animal Vitamin Supplement	count	0.0015586418
Antacids	count	0.000133898
Astringent Powders	ounce	0.205795918
Baby Cereal	ounce	0.502928983
Baby Wipes	count	0.016200947
Baking Chocolate	ounce	0.167257812
Baking Cups	count	0.000854144
Baking Mix	ounce	0.215466118
Bandages	count	0.001535113
Bathing Sponge	count	0.288484422
Bathwater additive	ounce	0.132870083
Beverage Insulator	count	0.3867641897
Body Scrub	fl_oz	0.126299996
Breakfast Cereal	ounce	0.364682835
Bookmark	count	0.0016908584
Bronzer and Blush Powder	ounce	3.133473908
Calcium Supplement	count	0.000362695
Cell Phone Cables	count	0.294286968
Cellphone Data Cables	count	0.145560723
Chewing Gum	count	0.001063476
Children's Vitamins	count	0.000318177

Chocolate Candy	ounce	0.178622424
Cold and Flu Remedies	count	0.000328231
Collagen supplement	ounce	0.425343795
Computer Lightning Cables	count	0.352973112
Computer USB Cables	count	0.589240465
Condiments	fl_oz	0.1759288038
Condiments	ounce	0.1749003580
Conditioner	fl_oz	0.17129922
Conditioner Bars	ounce	1.71438596
Conditioning Shampoo Bars	oz	4.673587214
Conditioning Shampoos	fl_oz	0.167178615
Contact Lens Cleaner	fl oz	0.3080416496
Cosmetic Powder	ounce	1.154225183
Cosmetic Sponge	count	0.0109542077
Cough Drops	count	0.001397466
Cough Syrup	fl_oz	0.198584487
Crackers	ounce	0.60009587
Culinary Salt	ounce	0.13080171890
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
Eyebrow Color	ounce	0.12061185863
Eyelid Color	ounce	0.349817925
Eyelid Color	fl_oz	1.04842805
Fabric Softener	fl_oz	0.227143942
Fabric Softener	ounce	0.235872726
Fabric Softener	count	0.003132078
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
Food Coloring	fl oz	0.094243187
Food Coloring	ounce	0.100864939
Foot Mask	count	0.610080294
Glass Cleaners	fl_oz	0.199083576

Hair Coloring Agent	fl_oz	0.153006451
Hair Coloring Agent	ounce	0.246905012
Hair Gels and Creams	ounce	0.200122346
Hair Removal Wax	ounce	0.156252909
Hair Styling Agent	fl_oz	0.208193423
Hand Sanitizer	fl_oz	0.145037043
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
Leavening Agent	ounce	0.14414127860
Lip Balm	count	0.02837219
Lip Balm	ounce	0.353026223
Lip Color	fl_oz	0.303220244
Lip Color	ounce	0.216741469
Liquid Bathroom Cleaners	fl_oz	0.197507565
Liquid Bronzer and Blush	fl_oz	0.311364368
Liquid Deodorant	fl_oz	0.203057476
Liquid Dishwasher Detergent	fl_oz	0.170107593
Liquid Ink	fl_oz	0.0284407568
Liquid Ink	ounce	0.3238413750
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
Makeup Primer	fl_oz	0.293448495
Makeup Primer	ounce	0.254374301
Mascara	fl_oz	0.850219466
Medication	ounce	0.148893703
Medication	fl_oz	0.265931749
Medication	count	0.000109849
Moisturizing Lotion	fl_oz	0.179692419
Moisturizing Lotion Bars/Moisturizing Creams	ounce	0.201275982
Mouthwash	fl_oz	0.177328247

Multivitamins	count	0.000512606
Multivitamins	count	0.000180652
Nail Clipper	count	0.083996538
Nutritional Supplement	count	0.000285452
Nutritional Supplement	ounce	0.316973612
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
Pen or Marker Ink Cartridge Refill	count	0.0025443939
Personal Cleaning Wipes	count	0.002089005
Pet Food	ounce	0.246206009
Pet odor and stain remover	fl_oz	0.189201619
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
Protein Powder	ounce	0.4355191286
Puffed Snacks	ounce	1.140338069
Rice Mix	ounce	0.21594100480
Room deodorizer	fl_oz	0.275612297
Sanitary Napkins	count	0.01389496
Sauce	fl_oz	0.2334776849
Sauce	ounce	0.1780031711
Snack Chips and Crisps	ounce	1.017695773
Seasoning	ounce	0.163617052
Shampoo	fl_oz	0.184505427
Shampoo Bars	ounce	0.363322636
Shaving cream	fl_oz	0.200496752
Shaving cream	ounce	0.171622208
Skin foundation and concealer	fl_oz	0.357825981
Skin foundation and concealer	ounce	0.52937477
Skin Serum	fl oz	0.53727629
Small Trash Bags	count	0.002290142
Snack Food Bars	count	0.762063521
Snack Food Bars	ounce	0.205716586

Soap Bars and Powders	ounce	0.127204379
Soap Dish	count	0.6268514051
Solid Deodorant	ounce	0.281085276
Sugar Candy	ounce	0.195405322
Sugar Substitute	ounce	0.1964618086
Sunscreen Bars	ounce	0.260603429
Surface cleaning wipes	count	0.014615962
Surface Protection Wax	fl oz	0.1749252795
Syrup	ounce	0.24394027
Tampons	count	0.004308811
Tea Bags	count	0.009888123
Toilet Paper	sheets	0.000183663
Tooth Whiteners	count	0.010619093
Tooth Whiteners	ounce	0.138420379
Toothpaste	ounce	0.235559095
Toothpaste Capsules	count	0.004530731
Tweezer	count	0.0318563518
Vegetable Oil	fl_oz	0.178067915
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:

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

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

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

Use equivalent product volume in unit efficiency calculation:

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