

Tabulation of Alcohol Content of Beer and Malt Beverages*

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Abstract

We present data from the analysis of the alcohol content of 391 beers and malt beverages available for sale in the State of Washington. The beverages were tested by gas chromatography for their alcohol content. Considerable variability in the alcoholic strength was found, even within the same class. Overall, the range of concentrations was 2.92% (v/v) to 15.66% (v/v). The alcohol content of beverages consumed is a critical factor in Widmark or volume-of-distribution-type calculations used to estimate blood or breath alcohol content from patterns of alcohol consumption. Using the correct alcohol content for beer, when the brand is known, can make a significant difference in the reliability of the calculation, and the data presented here should assist with optimizing the accuracy of the calculation.

Introduction

Reliable estimates of a person's blood- or breath-alcohol content can be made using a volume of distribution calculation such as the well-known Widmark formula (1). This approach has been validated numerous times (2–4) and has a reasonable degree of accuracy when the underlying parameters, subject weight and gender, timing, volume, and alcohol concentration of drinks, are reliably known. Error is introduced into the estimate by differences between the assumed and actual Widmark r factor (assumed to be 0.55 for men and 0.68 for women) and elimination rates (β) for the individual. These latter factors, r and β , for all practical purposes, have to be population estimates. Even if the subject is available to be tested, these parameters can change and differ markedly over short periods of time, making a post hoc determination of their actual value in an individual of relatively little value in improving the reliability of the calculation. Ensuring accuracy in the other factors in the equation, however, especially the alcohol content of the bev-

erage at issue, can eliminate one of the major potential sources of error in the estimate. For example, if the subject weighs 100 lbs, and their estimated weight is inaccurate by 10 lbs, that would introduce an error of 10% into the calculation. If, however, the alcohol strength of the beverage is 6%, and the assumed concentration is 4%, that would introduce an error of up to 50%. The data in Table I are intended to reduce this source of error in the Widmark calculation. Similar, although less extensive, tabulations have been prepared in the past (5–7), but because the alcoholic beverage market changes with some frequency, it is appropriate to resurvey this issue. The data represent the actual measured alcohol concentration of beers on sale in Washington state in 1997–1998, and although several new brands have since appeared, the vast majority of these beverages is still available.

Methods

Bottles and cans of over four hundred brands of beer and malt beverages were provided by the Washington State Liquor Control Board, or purchased from local stores. Beverage containers were opened, and an aliquot of the contents (10 mL) was degassed by filtration through medium speed, 0.210-mm filter paper (Schleicher and Schuell, Keene, NH). The filtrate was diluted 1:50 with 8 MΩ water (Millipore, Milford, MA) using volumetric glassware. Aliquots (200 μL) of these solutions were pipetted and mixed with an aqueous solution of *n*-propanol (1 g/L) (1500 μL) as internal standard and placed in sealed 10-mL headspace vials (Hewlett-Packard, Palo Alto, CA) for analysis by gas chromatography (GC). Packed-column GC analysis was performed on model 6890 GCs (Hewlett-Packard) coupled to HP 7694 headspace autosamplers. Two aliquots of each beverage were prepared, and each was tested in duplicate on both Carbowax 20M and THEED phases, both on Carbowax 80/100 support in 6-ft. glass columns with an internal diameter of 1/8 in. (i.e., four determinations). The specificity of this approach has been discussed elsewhere (8). The results of the two determinations were averaged and mathematically rounded to two decimal places.

* These data were the basis for the discussion in Case et al. (9); however, the *Journal of Forensic Sciences* declined to publish the full data set on which that article is based. This publication is intended to make these data available to the forensic toxicology community.

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Of the 391 beers and malt beverages tested for alcohol content, 73.7% were domestic U.S. brands, followed in frequency by English (6.4%), Belgian (5.0%), and Canadian (4.2%) brands. Note, however, that many foreign brands are brewed by contract brewers under license in the United States.

Results and Discussion

The brand name of the beverage, volume of the container, its measured alcohol concentration in percent by volume (% v/v)¹, the class or type of beverage, the manufacturer, the country of origin, and if the container was labeled with the alcohol concentration, and if so the concentration indicated, are given in Table I. The analytical method was demonstrated to have between-day precision (CV) of 1.6%, and an accuracy of 0.08% based on replicate ($n = 12$) analysis of a 5% (v/v) control. Table I shows the actual analytical result. Quality control of brands for alcohol content is variable, and alcohol content is estimated by

hygrometry, which may be less accurate than GC. Furthermore, the manufacturer may purposely change the alcohol content of the beer for marketing purposes. However, use of these values for alcohol concentration when the actual brand of beer is known, and a sample is not available for a retest, will produce more accurate results in a Widmark calculation than an across-the-board assumption regarding the alcohol strength of the "average" beer. A more detailed discussion regarding patterns of alcohol strength between styles of beer and summary statistics have been presented elsewhere (9); the data are presented here for practical application in calculations of this type. The broad range of alcohol concentrations evident in this dataset should encourage caution about assumptions for an "average" alcohol concentration for beer.

¹Alcoholic beverage strength is most often described as percent by volume (% v/v). When it is given as percent by weight (% w/v), the strength in percent by volume can be calculated by multiplying by the specific gravity (typically 1.005–1.010) and dividing by 0.789, the density of alcohol. Liquor alcoholic strength is often given in degrees proof, with 80° being equivalent to 40% (v/v) in the United States. Some beers are now also listed on the label as "proof of spirits", which is twice the percent by volume.

Table I. Brand, Measured Alcohol Concentration (%v/v), Classification, Manufacturer, Origin, and Alcohol Content for 391 Beers and Malt Beverages

Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
A-B Special Winter Brew 1996	12	4.78	Ale - Seasonal	Anheuser-Busch Brewing Co.	USA, MO	no
Abbaye De Saint Landelin Blond Abbey Ale	—*	5.98	Ale	Les Brasseurs de Gayant	France	no
Adelscott Smoked Malt Liquor	8.45	6.27	Malt Liquor	Brasserie et Maltere Du Pecheur	France	no
Admiralty Ale Eagles Roost Pale Ale	12	5.65	Ale	Aviator Ales	USA, WA	no
Admiralty Ale Seafarer Amber Ale	12	5.00	Ale	Aviator Ales	USA, WA	no
Admiralty Ale Summer Sojourn Ale	12	5.25	Ale	Aviator Ales	USA, WA	no
Alaskan Amber Alt Style Beer	12	5.44	Ale	Alaskan Brewing & Bottling Co.	USA, AK	no
Alaskan Frontier American Amber Ale	12	5.32	Ale	Alaskan Brewing & Bottling Co.	USA, AK	no
Alaskan Pale Golden Ale	12	5.32	Ale	Alaskan Brewing & Bottling Co.	USA, AK	no
Amstel Light Beer	12	3.61	Light	Amstel Brouwerij B. V.	Holland	no
Anchor Liberty Ale	12	5.70	Ale	Anchor Brewing Co.	USA, CA	no
Anchor Our Special Ale Christmas 1997	12	5.28	Ale - Seasonal	Anchor Brewing Co.	USA, CA	no
Anchor Steam Beer	12	5.09	Lager	Anchor Brewing Co.	USA, CA	no
Asahi Draft Beer	12	4.91	Lager	Asahi Breweries LTD	Japan	no
Augsburger Golden Beer	12	5.09	Lager	Augsburger Brewing Co.	USA, MN	no
Aviator Harvest Pale Ale	12	4.68	Ale	Aviator Ales	USA, WA	no
Aviator India Pale Ale	12	5.12	Bitter	Aviator Ales	USA, WA	no
Bacardi Bahama Mama	12	3.20	Malt Beverage	Bacardi & Co. Ltd.	USA, CA	3.20
Bacardi Calypso Berry	12	3.20	Malt Beverage	Bacardi & Co. Ltd.	USA, CA	3.20
Bacardi Key Lime	12	3.04	Malt Beverage	Bacardi & Co. Ltd.	USA, CA	3.20
Bacardi Pina Colada	12	3.04	Malt Beverage	Bacardi & Co. Ltd.	USA, CA	3.20
Bacardi Strawberry Daiquiri	12	3.10	Malt Beverage	Bacardi & Co. Ltd.	USA, CA	3.20
Bachelor Bitter	12	5.06	Bitter	Deschutes Brewery Co.	USA, OR	no
Bass Pale Ale	12	5.38	Ale	Bass Brewers Ltd.	England	no
Bateman's Salem Porter	16.9	5.57	Porter	George Bateman and Son	England	no
Bavarian Schweizerhof-Brau	—	5.28	Lager	Privatbrauerei Franz Joseph Sailer	Germany	no
Beartooth Raspberry Lager	12	4.37	Fruit	Beartooth Brewing Co.	USA, MN	no
Beck's	12	5.22	Lager	Braueri Beck & Co.	Germany	no
Beck's Dark	12	5.22	Lager	Braueri Beck & Co.	Germany	no
Belhaven Scottish Ale	16.9	3.70	Ale	Belhaven Brewing Co.	Scotland	no
Belhaven St. Andrews Ale "Scotland"	16.9	4.33	Ale	Belhaven Brewing Co.	Scotland	no

* Not recorded.

Table 1. Brand, Measured Alcohol Concentration (%v/v), Classification, Manufacturer, Origin, and Alcohol Contentration for 391 Beers and Malt Beverages (continued)

Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Belle-Vue Framboise	12.67	5.25	Lambic	Brewery Belle-Vue	Belgium	no
Belle-Vue Gueuze	12.67	5.32	Lambic	Brewery Belle-Vue	Belgium	no
Belle-Vue Kriek	12.67	4.91	Lambic	Brewery Belle-Vue	Belgium	no
Bert Grant's Amber Ale	12	4.72	Ale	Yakima Brewing & Malting Co.	USA, WA	5.50
Bert Grant's Apple Honey Ale	12	4.18	Fruit	Yakima Brewing & Malting Co.	USA, WA	no
Bert Grant's Celtic Ale	12	2.92	Ale	Yakima Brewing & Malting Co.	USA, WA	no
Bert Grant's Hefeweizen	12	4.62	Hefeweizen	Yakima Brewing & Malting Co.	USA, WA	4.00
Bert Grant's Imperial Stout	12	6.68	Stout	Yakima Brewing & Malting Co.	USA, WA	no
Bert Grant's India Pale Ale	12	5.03	Bitter	Yakima Brewing & Malting Co.	USA, WA	4.20
Bert Grant's Perfect Porter	12	3.64	Porter	Yakima Brewing & Malting Co.	USA, WA	4.00
Bert Grant's Scottish Ale	12	4.68	Ale	Yakima Brewing & Malting Co.	USA, WA	4.70
Bert Grant's Winter Ale	12	6.36	Ale - Seasonal	Yakima Brewing & Malting Co.	USA, WA	6.00
Big Fog Amber Lager	12	6.84	Lager	The Great Northern Brewing Co.	USA, MT	no
Big Rock Black Amber Ale	11.5	7.25	Ale	Big Rock Brewery	Canada	no
Big Rock Buzzard Breath Ale	11.5	5.32	Ale	Big Rock Brewery	Canada	no
Big Rock Grasshopper Wheat Ale	12	4.94	Hefeweizen	Big Rock Brewery	Canada	no
Big Rock Maggie ale brewed with rye	11.5	5.51	Ale	Big Rock Brewery	Canada	no
Big Rock McNally's Ale	11.5	7.79	Ale	Big Rock Brewery	Canada	no
Big Rock Warthog Ale	11.5	4.81	Ale	Big Rock Brewery	Canada	no
Bird Creek Anchorage Ale	12	5.19	Ale	Bird Creek Brewery	USA, AK	no
Bird Creek Denali Style Ale	12	5.25	Ale	Bird Creek Brewery	USA, AK	no
Bird Creek Iliamna Raspberry Style Wheat	12	4.59	Fruit	Bird Creek Brewery	USA, AK	no
Bird Creek Old 55	12	4.91	Ale	Bird Creek Brewery	USA, AK	no
Black Label Carling's	12	4.68	Lager	G. Heileman Brewing Co.	USA, MI	no
Blue Moon Abbey Ale	12	5.35	Ale	Blue Moon Brewing Co.	USA, OH	no
Blue Moon Belgian White	12	5.32	Ale	Blue Moon Brewing Co.	USA, OH	no
Blue Moon Nut Brown Ale	12	5.00	Ale	Blue Moon Brewing Co.	USA, OH	no
Blue Moon Raspberry Cream	12	5.63	Fruit	Blue Moon Brewing Co.	USA, OH	no
Boddingtons Pub Ale Draught	14.9	5.19	Ale	Strangeways Brewery	England	no
Bohemia	12	4.68	Lager	Cerveceria Cuauhtemoc	Mexico	no
Bokrijks Kruikenbier	29.4	7.59	Beer	Br. Sterken's Meer	Belgium	no
Bos Keun Special Paasbier	12	6.04	Lager - Seasonal	Brewed & Bottled by DDB 8160	Belgium	7.00
Boulder Amber Ale	12	4.74	Ale	Rockies Brewing Co.	USA, CO	no
Boulder Brown Ale	12	4.52	Ale	Rockies Brewing Co.	USA, CO	no
Boulder Cliffhanger Ale	12	4.62	Ale	Rockies Brewing Co.	USA, CO	no
Boulder ESB extra special bitter	12	5.13	Bitter	Rockies Brewing Co.	USA, CO	no
Boulder Extra Pale Ale	12	5.16	Ale	Rockies Brewing Co.	USA, CO	no
Boulder Porter	12	5.00	Porter	Rockies Brewing Co.	USA, CO	no
Boulder Stout	12	5.92	Stout	Rockies Brewing Co.	USA, CO	no
Brasal	11.5	5.63	Lager	Brasserie Brasal Brewing	Canada	6.10
Brasal Bock	11.5	6.90	Bock	Brasserie Brasal Brewing	Canada	7.80
Bridgeport Black Strap Stout	12	5.60	Stout	Bridgeport Brewing Co.	USA, OR	6.00
Bridgeport Blue Heron Amber Ale	12	5.06	Ale	Bridgeport Brewing Co.	USA, OR	5.20
Bridgeport ESB Extra Special Bitter	12	5.63	Bitter	Bridgeport Brewing Co.	USA, OR	5.80
Bridgeport India Pale Ale	12	5.13	Bitter	Bridgeport Brewing Co.	USA, OR	5.50
Bridgeport Porter	12	5.35	Porter	Bridgeport Brewing Co.	USA, OR	5.50
Budweiser	12	4.76	Lager	Anheuser-Busch Brewing Co.	USA, MO	no
Budweiser Ice	12	5.30	Ice	Anheuser-Busch Brewing Co.	USA, MO	5.50
Budweiser Ice Light	12	5.41	Light	Anheuser-Busch Brewing Co.	USA, MO	5.50
Budweiser Light	12	4.15	Light	Anheuser-Busch Brewing Co.	USA, MO	no
Bull Ice	—*	8.16	Ice	The Stroh Brewery Co.	USA, MI	8.00
Burton Ale Double Diamond	12	5.44	Ale	Burton Brewery	England	no
Busch Beer	12	5.38	Lager	Anheuser-Busch Brewing Co.	USA, MO	no
Busch Ice	12	5.82	Ice	Anheuser-Busch Brewing Co.	USA, MO	5.90
Captains City Coupe's Success Cream Ale	22	4.49	Ale	Captains City Brewery Inc.	USA, WA	no

* Not recorded.

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Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Carlsberg Elephant	12	6.68	Lager	Carlsberg Bryggerierne	Denmark	no
Cascade Golden Ale	12	4.05	Ale	Deschutes Brewery	USA, OR	no
Chapeau Exotic Lambic	12.7	3.42	Lambic	Chapeau	Belgium	no
Chapeau Fraises Lambic	12.7	2.97	Lambic	Chapeau	Belgium	no
Chapeau Kriek Lambic	12.7	3.29	Lambic	Chapeau	Belgium	no
Chapeau Peche Lambic	12.7	3.96	Lambic	Chapeau	Belgium	no
Chung Hua Beer	12	5.28	Lager	Chung Hua Beer Co. LTD	China	4.80
Coors Banquet Beer	12	4.87	Lager	Coors Brewing Co.	USA, CO	no
Coors Light	12	4.11	Light	Coors Brewing Co.	USA, CO	no
Corona Extra Beer	12	4.46	Lager	Cerveceria Modelo	Mexico	no
Crested Butte Red Lady Ale	12	4.72	Ale	Crested Butte Brewery & Pub	USA, CO	no
Crested Butte White Buffalo Peace Ale	12	4.91	Ale	Crested Butte Brewery & Pub	USA, CO	no
Cutter Non-Alcohol Brew	12	0.47	Non-alcoholic	Coors Brewing Co.	USA, CO	< 0.5%
Deschutes Black Butte Porter	12	5.47	Porter	Deschutes Brewing Co.	USA, OR	no
Dos Equis XX Beer	12	4.34	Lager	Cerveceria Moctezuma	Mexico	no
Dragon Stout	12	7.15	Stout	Desnoes-Goeddes	Jamaica	no
Dubuque Star Big Muddy Red	12	5.47	Ale	Dubuque Star Brewing Co.	USA, IO	no
Dubuque Star River Town Brown	12	5.06	Lager	Dubuque Star Brewing Co.	USA, IO	no
Duvel Belgian Ale (green)	25.4	7.34	Ale	Moortgat Breweries	Belgium	no
Duvel Belgian Ale (red)	11.2	8.04	Ale	Moortgat Breweries	Belgium	no
Ename Dubbel Abbey Ale	11.2	7.31	Ale	Abdij Sint-Salvator Ename Annd	Belgium	6.50
Ename Tripel Abbey Ale	11.2	8.48	Ale	Abdij Sint-Salvator Ename Annd	Belgium	9.00
Fischer Hoopla Amber	—*	6.14	Ale	Brasserie et Malterie Du Pecheur	France	no
Fischer Hoopla Bitter	—	5.03	Bitter	Brasserie et Malterie Du Pecheur	France	no
Fischer La Belle Strasbourgeoise	—	4.97	Porter	Brasserie et Malterie Du Pecheur	France	no
Fish Brewing Co. India Pale Ale	12	5.06	Bitter	Fish Brewing Co.	USA, WA	no
Fish Brewing Co. Mudshark Porter	12	6.08	Porter	Fish Brewing Co.	USA, WA	no
Foster's Lager	12	4.94	Lager	Carlton and United Breweries	Australia	no
Foster's Special Bitter	25.4	5.63	Bitter	Carlton and United Breweries	Australia	5.60
Full Sail Amber Ale	12	6.02	Ale	Full Sail Brewing Co.	USA, OR	no
Full Sail Equinox ESB extra special bitter	12	5.82	Bitter	Full Sail Brewing Co.	USA, OR	5.50
Full Sail India Pale Ale	12	6.93	Bitter	Full Sail Brewing Co.	USA, OR	no
Full Sail Nut Brown Ale	12	5.50	Ale	Full Sail Brewing Co.	USA, OR	no
Full Sail Oktoberfest	12	5.28	Lager - Seasonal	Full Sail Brewing Co.	USA, OR	no
Full Sail Very Special Pale Golden Ale	12	5.79	Ale	Full Sail Brewing Co.	USA, OR	5.90
Full Sail Wassail Winter Ale	12	6.99	Ale	Full Sail Brewing Co.	USA, OR	6.50
Fuller's London Pride Imported Pale Ale	—	4.52	Ale	Griffin Brewery Fuller's	England	no
George Killian's Irish Red Ale	12	5.03	Ale	Coors Brewing Co.	USA, CO	no
George Killian's Wilde Honey	12	5.57	Fruit	Unived Ltd	USA, CO	5.20
Golden Gate Original Ale	12	5.25	Ale	Golden Pacific Brewing Co.	USA, CA	no
Golden Promise Organically Produced Ale	—	5.00	Ale	Caledonian Brewing Co.	Scotland	no
Gordon Biersch Marzen Smooth Auburn Lager	12	5.41	Lager	Gordon Biersch Brewing Co.	USA, CA	no
Gordon Biersch Pilsner Crisp Golden Lager	12	5.28	Lager	Gordon Biersch Brewing Co.	USA, CA	no
Grimbergen Double Belgian Special						
Dark Abbey Ale	12	6.08	Ale	N.V. Br Alken-Maes Kontidr	Belgium	no
Grimbergen Triple Belgian Amber Abbey Ale	12	8.89	Ale	N.V. Br Alken-Maes Kontidr	Belgium	no
Grolsch Amber Beer	12	4.91	Ale	Grolsch Bierbrouweri	Holland	no
Grolsch Lager Beer	—	5.13	Lager	Grolsch Bierbrouweri	Holland	no
Guinness EX Stout	12	6.08	Stout	St. James Gate Brewery	Ireland	no
Guinness Pub Draught	14.9	4.18	Stout	St. James Gate Brewery	Ireland	no
Hair of the Dog Adam	12	10.28	Ale	Hair of the Dog Brewing Co.	USA, OR	10.12
Hair of the Dog Golden Rose	12	9.21	Ale	Hair of the Dog Brewing Co.	USA, OR	7.59
Hales Moss Bay Extra	12	3.99	Ale	Hale's Ale Brewing Co.	USA, WA	no
Hales Pale Ale	12	4.49	Ale	Hale's Ale Brewing Co.	USA, WA	no
Hamm's	12	4.75	Lager	Pabst Brewing Co.	USA, WI	no

* Not recorded.

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Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Harp Imported Lager Beer	12	5.00	Lager	Harp Brewery	Ireland	no
Haystack Black	12	4.74	Ale	Portland Brewing Co.	USA, OR	no
Heineken Lager Beer	12	5.06	Lager	Heineken Brouwerijen	Holland	no
Henry Weinhard's Amber Ale	12	5.28	Ale	Blitz-Weinhard Brewing Co.	USA, OR	no
Henry Weinhard's Porter	12	5.13	Porter	Blitz-Weinhard Brewing Co.	USA, OR	no
Henry Weinhard's Private Reserve Beer	12	4.78	Lager	Blitz-Weinhard Brewing Co.	USA, OR	no
Henry Weinhard's Private Reserve Dark Beer	12	5.09	Lager	Blitz-Weinhard Brewing Co.	USA, OR	no
Henry Weinhard's Private Reserve Light	12	3.92	Light	Blitz-Weinhard Brewing Co.	USA, OR	no
Hiite	—*	4.19	Lager	Chosun Brewery	Korea	no
Hoegaarden Original White Ale	12	4.94	Ale	Brouwerij De Kluis	Belgium	no
Humbolt Red Nectar Ale	12	4.87	Ale	Humbolt Brewing Co.	USA, CA	no
Hurricane Malt Liquor	40	5.63	Malt Liquor	Anheuser-Busch Brewing Co.	USA, MO	no
Icehouse	12	5.25	Ice	Miller & Plank Road Brewing Co.	USA, WI	5.50
Icicle Creek Winter Ale	12	5.47	Ale - Seasonal	Portland Brewing Co.	USA, OR	no
Jubelale	12	6.46	Ale - Seasonal	Deschutes Brewery	USA, OR	no
Kokanee	11.5	4.91	Lager	Columbia Brewing Co. Labatt	Canada	no
Labatt Blue	11.5	4.97	Lager	Labatt Breweries	Canada	no
Lagunitas Dog Town Pale Ale	12	5.28	Ale	Laquintas Brewing Co.	USA, CA	no
LaRossa Moretti Birra	12	6.52	Lager	Birra Moretti	Italy	no
Latrobe American Pale Ale	12	5.06	Ale	Latrobe Brewing Co.	USA, PA	no
Latrobe Bavarian Black	12	4.62	Lager	Latrobe Brewing Co.	USA, PA	no
Latrobe Bohemian Pilsner	12	4.68	Lager	Latrobe Brewing Co.	USA, PA	no
Liefmans Frambozenbier	12.7	4.65	Fruit	Brouwerij Liefmans	Belgium	no
Lowenbrau Dark Special Beer	12	4.68	Lager	Miller Brewing Co.	USA, WI	no
Lowenbrau Special Beer	12	4.75	Lager	Miller Brewing Co.	USA, WI	no
Lucky	12	4.53	Lager	General Brewing Co.	USA, WA	no
MacGillivray's Australian Original						
Two Dogs Lemon Brew	12	4.34	Malt Beverage		Australia	4.20
Mackeson XXX Stout	12	4.43	Stout	Whitbread PLC	England	no
MacTarnahan's Scottish Style Amber Ale	12	5.19	Ale	Portland Brewing Co.	USA, OR	no
Mad River Jamaica Red Ale	12	6.68	Ale	Mad River Brewing Co.	USA, CA	no
Mad River John Barleycorn 7.75-9.25	12	10.41	Barley Wine	Mad River Brewing Co.	USA, CA	7.00
Mad River Steelhead Extra Pale Ale	12	6.67	Ale	Mad River Brewing Co.	USA, CA	no
Mad River Steelhead Extra Stout	12	6.65	Stout	Mad River Brewing Co.	USA, CA	no
Maes Pils	12	4.87	Lager	Mae Waarloos	Belgium	no
Maredsous Blonde Abbey Ale	11.2	6.61	Ale	Moortgat Breweries	Belgium	6.00
Maritime Pacific Flagship Red Ale	12	5.95	Ale	Maritime Pacific Brewing Co.	USA, WA	no
Maritime Pacific Islander Pale Ale	12	6.20	Ale	Maritime Pacific Brewing Co.	USA, WA	no
Maritime Pacific Jolly Roger Christmas Ale 96	—	8.58	Ale - Seasonal	Maritime Pacific Brewing Co.	USA, WA	no
Maritime Pacific Jolly Roger Christmas Ale 97	12	9.62	Ale - Seasonal	Maritime Pacific Brewing Co.	USA, WA	no
Maritime Pacific Nightwatch Dark Ale	12	5.63	Ale	Maritime Pacific Brewing Co.	USA, WA	no
McMullen's Anniversary Porter	—	5.00	Porter	Hertfordshire Family Brewers	England	no
McMullen's Oatmeal Ale	—	5.03	Ale	Hertfordshire Family Brewers	England	no
McMullen's Original Bitter	—	4.97	Bitter	Hertfordshire Family Brewers	England	no
Mendocino Black Hawk Stout	12	5.25	Stout	Mendocino Brewing Co.	USA, CA	5.20
Mendocino Red Tail Ale	12	6.17	Ale	Mendocino Brewing Co.	USA, CA	no
Michelob	12	5.25	Lager	Anheuser-Busch Inc.	USA, MO	no
Michelob Amber Bock	12	4.87	Bock	Anheuser-Busch Inc.	USA, MO	no
Michelob Golden Pilsner all malt beer	12	4.49	Lager	Anheuser-Busch Inc.	USA, MO	no
Michelob Hefeweizen Wheat Beer						
Premium Brewed	12	4.59	Hefeweizen	Anheuser-Busch Inc.	USA, MO	no
Michelob Honey Lager	12	4.24	Lager	Anheuser-Busch Inc.	USA, MO	no
Michelob Light Beer	12	4.34	Light	Anheuser-Busch Inc.	USA, MO	no
Michelob Pale Ale Dry Hopped	12	4.78	Ale	Anheuser-Busch Inc.	USA, MO	no
Michelob Porter All Malt	12	4.49	Porter	Anheuser-Busch Inc.	USA, MO	no

* Not recorded.

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Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Michelob Winter Brew Spiced Ale	12	5.79	Ale - Seasonal	Anheuser-Busch Inc.	USA, MO	no
Mickeys Malt Liquor	12	5.66	Malt Liquor	G. Heileman Brewing Co.	USA, MI	no
Miller Genuine Draft Beer	12	4.62	Lager	Miller Brewing Co.	USA, WI	no
Miller Genuine Draft Light Beer	12	4.08	Light	Miller Brewing Co.	USA, WI	no
Miller High Life	12	4.59	Lager	Miller Brewing Co.	USA, WI	no
Miller Lite	12	3.99	Light	Miller Brewing Co.	USA, WI	no
Milwaukee's Best Beer	12	4.43	Lager	Miller Brewing Co.	USA, WI	no
Milwaukee's Best Ice	12	5.76	Ice	Miller Brewing Co.	USA, WI	5.90
Milwaukee's Best Light Beer	12	4.05	Light	Miller Brewing Co.	USA, WI	no
Mirror Pond Pale Ale	12	4.87	Ale	Deschutes Brewing Co.	USA, OR	no
Mississippi Mud	32	5.16	Porter	Memphis Brewing Co.	USA, NY	no
Molson Canadian Beer	12	5.09	Lager	Molson Breweries of Canada	Canada	no
Molson Golden Ale	12	5.06	Ale	Molson Breweries of Canada	Canada	no
Molson Ice	12	5.69	Ice	Molson Breweries of Canada	Canada	5.60
Moosehead Canadian Lager Beer	12	4.62	Lager	Moosehead Brewery	Canada	no
Moretti Birra Friulana	12	4.84	Fruit	Birra Moretti; S.P.A.	Italy	no
Mrs. Pucker's Lemon Malt Beverage	12	4.87	Malt Beverage	Mrs. Puckers	USA, MN	no
Murphy Irish Stout pub draught	—*	3.73	Stout	Murphy's Brewing Co.	Ireland	no
Natural Ice Beer	12	5.60	Ice	Anheuser-Busch Brewing Co.	USA, MO	5.90
Natural Light	12	4.15	Light	Anheuser-Busch Brewing Co.	USA, MO	no
Negra Modelo	12	5.79	Ale	Cerveceria Modelo S.A.	Mexico	no
Newcastle Brown Ale	12	4.49	Ale	Newcastle Breweries Ltd.	England	no
North Coast Blue Star Wheat Beer	12	4.59	Hefeweizen	North Coast Brewing Co.	USA, CA	no
North Coast Old No. 38 Stout	12	5.22	Stout	North Coast Brewing Co.	USA, CA	no
North Coast Old Rasputin Russian Imperial Stout	12	8.89	Stout	North Coast Brewing Co.	USA, CA	no
North Coast Red Seal Ale	12	5.47	Ale	North Coast Brewing Co.	USA, CA	no
North Coast Scrimshaw Pilsner Style Beer	12	4.02	Lager	North Coast Brewing Co.	USA, CA	no
North Coast Traditional Bock	22	6.77	Bock	North Coast Brewing Co.	USA, CA	no
Northstone Amber Ale	12	4.81	Ale	Miller & Plank Road Brewery	USA, WI	no
Norwester Hefeweizen	—	5.12	Hefeweizen	Nor'Wester Brewing Co.	USA, OR	no
Obsidian Stout	12	6.30	Stout	Deschutes Brewing Co.	USA, OR	6.74
O'Doul's Non-Alcohol Brew	12	0.20	Non-alcoholic	Anheuser-Busch Brewing Co.	USA, MO	< 0.5%
Old Knucklehead	12	9.02	Barley Wine	Bridgeport Brewing Co.	USA, OR	9.10
Old Milwaukee	12	4.62	Lager	Stroh's Brewing Co.	USA, MI	no
Old Peculier	12	5.82	Ale	T&R Theakston Ltd	England	no
Olde English 800 Ice	12	7.97	Ice	Pabst Brewing Co.	USA, WI	8.00
Olde English 800 Malt Liquor	12	7.69	Malt Liquor	Pabst Brewing Co.	USA, WI	7.50
Olde English 800 Special Reseve Mixed Fruit	22	6.11	Fruit	Pabst Brewing Co.	USA, WI	6.00
Olympia Beer	12	4.65	Lager	Pabst Brewing Co.	USA, WA	no
One-Eyed Jack Alcohol Lemon Brew	12	5.16	Malt Beverage	The Thickhead Beverage Co.	USA, NJ	no
One-Eyed Jack Raspberry Brew	12	5.06	Malt Beverage	The Thickhead Beverage Co.	USA, NJ	no
Oregon Honey Beer	12	4.81	Fruit	Portland Brewing Co.	USA, OR	no
Oregon Original Hop Harvest Ale	12	5.95	Ale	Oregon Ale and Beer co.	USA, OR	no
Oregon Original India Pale Ale	12	5.89	Bitter	Oregon Ale and Beer co.	USA, OR	no
Oregon Original Nut Brown Ale	12	5.41	Ale	Oregon Ale and Beer co.	USA, OR	no
Oregon Original Raspberry Wheat	12	5.47	Fruit	Oregon Ale and Beer co.	USA, OR	no
Paulander Hefe-Weizen	—	5.54	Hefeweizen	Paulander Brewing	Germany	no
Paulander Oktoberfest Marzen amber	—	6.04	Ale	Paulander Brewing	Germany	no
Paulander Premium Pils extra dry	—	5.25	Lager	Paulander Brewing	Germany	no
Pete's Bohemian Pilsner	—	5.19	Lager	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Ale	12	4.94	Ale	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Amber Ale	12	5.06	Ale	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Honey Wheat	12	4.97	Hefeweizen	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Mardi Gras	12	5.06	Ale - Seasonal	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Summer Brew	12	4.56	Ale - Seasonal	Pete's Brewing Co.	USA, CA	no
Pete's Wicked Winter Brew	12	5.32	Ale - Seasonal	Pete's Brewing Co.	USA, CA	no

* Not recorded.

Table I. Brand, Measured Alcohol Concentration (%v/v), Classification, Manufacturer, Origin, and Alcohol Contentration for 391 Beers and Malt Beverages (continued)

Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Pike Pale Ale	12	5.38	Ale	The Pike Brewing Co.	USA, WA	no
Pike Street Stout	12	5.73	Stout	The Pike Brewing Co.	USA, WA	no
Pilsner Urquell	12	4.56	Lager	Pilsner Urquell	Czechoslovakia	no
Poorter	25.4	6.61	Porter	Sterkens	Belgium	no
Portland Summer Pale Ale	12	4.87	Ale - Seasonal	Portland Brewing Co.	USA, OR	no
Pyramid Apricot Ale	12	4.91	Fruit	Pyramid Hart Brewing Co.	USA, WA	no
Pyramid Best Brown	12	5.16	Ale	Pyramid Hart Brewing Co.	USA, WA	no
Pyramid Hefeweizen	12	5.00	Hefeweizen	Pyramid Hart Brewing Co.	USA, WA	no
Pyramid Pale Ale	12	4.94	Ale	Pyramid Hart Brewing Co.	USA, WA	no
Pyramid Porter	12	5.85	Porter	Pyramid Hart Brewing Co.	USA, WA	5.40
Pyramid Scotch Ale	12	6.90	Ale	Pyramid Hart Brewing Co.	USA, WA	7.20
Pyramid Snow Cap Ale	12	7.50	Ale - Seasonal	Pyramid Hart Brewing Co.	USA, WA	6.90
Pyramid Wheaten Ale	12	4.80	Ale	Pyramid Hart Brewing Co.	USA, WA	no
Rainier	12	4.91	Lager	Rainier Brewing Co.	USA, WA	no
Rainier Ale	12	7.47	Ale	Rainier Brewing Co.	USA, WA	7.20
Rainier Ice	12	5.30	Ice	Rainier Brewing Co.	USA, WA	5.60
Rainier Light	12	4.18	Light	Rainier Brewing Co.	USA, WA	no
Red Dog	12	4.81	Lager	Miller Brewing Co.	USA, WI	no
Red Hook Ballard Bitter IPA	12	7.02	Bitter	Red Hook Ale Brewery	USA, WA	no
Red Hook Black Hook Porter	12	5.28	Porter	Red Hook Ale Brewery	USA, WA	no
Red Hook Blond Ale	12	5.28	Ale	Red Hook Ale Brewery	USA, WA	no
Red Hook Double Black Stout	12	7.34	Stout	Red Hook Ale Brewery	USA, WA	no
Red Hook Extra Special Bitter	12	5.60	Bitter	Red Hook Ale Brewery	USA, WA	no
Red Hook Winterhook	12	5.70	Ale	Red Hook Ale Brewery	USA, WA	no
Red River Valley Honey Brown Ale	12	4.97	Ale	Northern Plains Brewing Co.	USA, MN	no
Red Wolf Red Lager Beer	12	5.28	Lager	Anheuser-Busch Brewing Co.	USA, MO	5.50
Rogue Ale	12	4.24	Ale	Oregon Brewing Co.	USA, OR	no
Rogue American Amber Ale	12	4.91	Ale	Oregon Brewing Co.	USA, OR	no
Rogue Dead Guy Ale	22	6.65	Ale	Oregon Brewing Co.	USA, OR	no
Rogue Golden Ale	22	4.94	Ale	Oregon Brewing Co.	USA, OR	no
Rogue Imperial Stout	7	10.22	Stout	Oregon Brewing Co.	USA, OR	no
Rogue Rogue Scotch Ale	7	7.09	Ale	Oregon Brewing Co.	USA, OR	no
Rogue Oregon Golden Ale	12	4.65	Ale	Oregon Brewing Co.	USA, OR	no
Rogue Shakespeare Stout	22	5.09	Stout	Oregon Brewing Co.	USA, OR	no
Rogue Younger's Special Bitter	12	4.15	Bitter	Oregon Brewing Co.	USA, OR	no
Rogue-XS Old Crustacean	7	10.51	Barley Wine	Oregon Brewing Co.	USA, OR	no
Rogue-XS Smoke Ale	7	5.79	Ale	Oregon Brewing Co.	USA, OR	no
Rolling Rock Extra Pale Premium Beer	12	4.65	Ale	Latrobe Brewery	USA, PA	no
Royal Oak Pale Ale	11.5	4.59	Ale	Eldridge Pope & Co. plc	England	no
Samuel Adams Boston Ale	12	4.56	Ale	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Boston Lager	12	5.13	Lager	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Cranberry Lambic	12	5.35	Lambic	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Cream Stout	12	4.78	Stout	Boston Beer Brewing Co.	USA, MA	5.06
Samuel Adams Golden Pilsner	12	5.19	Lager	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Honey Porter	12	5.32	Porter	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Octoberfest	12	5.98	Lager - Seasonal	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Scotch Ale	12	5.82	Ale	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Triple Bock	12	15.66	Bock	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams White Ale	12	5.32	Ale	Boston Beer Brewing Co.	USA, MA	no
Samuel Adams Winter Lager	12	6.77	Seasonal	Boston Beer Brewing Co.	USA, MA	no
Samuel Smith's India Pale Ale	18.7	5.09	Bitter	The Old Brewery Tadcaster	England	no
Samuel Smith's Nut Brown Ale	18.7	5.20	Ale	The Old Brewery Tadcaster	England	no
Samuel Smith's Oatmeal Stout	18.7	5.06	Stout	The Old Brewery Tadcaster	England	no
Samuel Smith's Winter Ale Welcome	18.7	6.20	Ale - Seasonal	The Old Brewery Tadcaster	England	no
Sapporo Black Stout Draft	22	5.44	Stout	Sapporo Beer	Japan	no
Saxer's Jackfrost Winter Doppelbock	12	7.56	Bock	Saxer Brewing Co.	USA, OR	8.00
Saxer's Lemon Lager	12	3.96	Lager - Seasonal	Saxer Brewing Co.	USA, OR	no

Table I. Brand, Measured Alcohol Concentration (%v/v), Classification, Manufacturer, Origin, and Alcohol Contentration for 391 Beers and Malt Beverages (continued)

Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Schell Doppel Bock Beer	12	6.36	Bock	August Schell Brewing Co.	USA, MN	no
Schell German style Pale Ale	12	5.16	Ale	August Schell Brewing Co.	USA, MN	no
Schell Schmalz's Alt Dark Ale	12	5.47	Ale	August Schell Brewing Co.	USA, MN	no
Schmidt's Ice	12	5.92	Ice	G. Heilman Brewing Co.	USA, MI	5.80
Schmidt's Premium Beer	12	4.56	Lager	G. Heilman Brewing Co.	USA, WI	no
Schmidt's Premium Beer Light	12	4.05	Light	G. Heilman Brewing Co.	USA, MI	no
Seagrams Fuzzy Navel flavored malt beverage	12	3.80	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Margarita flavored malt cooler	12	3.86	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Peach Daiquiri flavored malt beverage	12	3.80	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Pineapple Pina Colada flavored malt beverage	12	4.30	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Ruby Red Seabreeze flavored malt beverage	12	3.96	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Strawberry Daiquiri flavored malt beverage	12	4.08	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Berries flavored cooler	12	3.83	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Black Cherry flavored cooler	12	3.92	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Kiwi Strawberry flavored cooler	12	4.02	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Mango flavored cooler	12	3.80	Malt Beverage	Seagrams Beverage Co.	USA, IN	4.00
Seagrams Wild Orange Strawberry Passion flavored cooler	12	3.83	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Tropical Fruits flavored cooler	12	3.64	Malt Beverage	Seagrams Beverage Co.	USA, IN	no
Seagrams Wild Watermelon flavored cooler	12	3.61	Malt Beverage	Seagrams Beverage Co.	USA, IN	4
Sharp's Non-Alcohol Brew	12	0.37	Non-alcoholic	Miller Brewing Co.	USA, WI	< 0.5%
Sheaf Stout	25.6	5.79	Stout	Carleton & United	Australia	no
Sierra Nevada Celebration Ale	12	7.15	Ale	Sierra Nevada Brewing Co.	USA, CA	6.80
Sierra Nevada Pale Ale	12	5.57	Ale	Sierra Nevada Brewing Co.	USA, CA	no
Sierra Nevada Porter	12	5.66	Porter	Sierra Nevada Brewing Co.	USA, CA	6.00
Snake Eyes Alcohol Black Cherry Drink	22	4.46	Malt Beverage	Schoeling Brewing Co.	USA, OH	no
Snake Eyes Alcohol Lemon Drink	22	4.37	Malt Beverage	Schoeling Brewing Co.	USA, OH	no
Snake Eyes Alcohol Passion Punch Drink	22	4.52	Malt Beverage	Schoeling Brewing Co.	USA, OH	no
Spanish Peaks Black Dog Ale	12	5.32	Ale	Black Dog Brewing Co.	USA, WI	no
Spanish Peaks Black Dog Sweetwater Wheat Ale	12	3.92	Ale	Black Dog Brewing Co.	USA, WI	no
Spanish Peaks Black Dog Yellowstone Pale Ale	12	5.60	Ale	Black Dog Brewing Co.	USA, WI	no
Spanish Peaks Honey Raspberry Ale	12	4.59	Fruit	Black Dog Brewing Co.	USA, WI	no
Spanish Peaks Peaches and Cream	12	4.13	Fruit	Black Dog Brewing Co.	USA, WI	no
Spanish Peaks Porter	12	4.65	Porter	Black Dog Brewing Co.	USA, WI	no
St. Ides Special Brew Berry	20	6.01	Malt Beverage	St. Ides Brewing Co.	USA, MI	6.00
St. Ides Premium Malt Liquor	20	7.40	Malt Liquor	St. Ides Brewing Co.	USA, MI	no
St. Ides Special Brew Mixed Fruit malt beverage	20	5.76	Malt Beverage	St. Ides Brewing Co.	USA, MI	6.00
St. Ides Special Brew Passion	20	5.66	Malt Beverage	St. Ides Brewing Co.	USA, MI	6.00
St. Ides Special Brew Pineapple-Coconut malt beverage	20	5.89	Malt Beverage	St. Ides Brewing Co.	USA, MI	6.00
St. Pauli Girl Beer	12	5.03	Lager	St. Pauli	Germany	no
Steel Reserve	40	8.42	Malt Liquor	Steel Brewing Co	USA, MN	8.10
Steinlager	11.2	4.91	Lager	Unibev Ltd	New Zealand	5.00
Storm	17	9.56	Malt Liquor	Lancaster Brewing Co.	England	10.00
Stroh's Beer	12	4.81	Lager	Stroh's Brewing Co.	USA, MI	no
Sun Devil Alcohol Lemon Drink	12	4.91	Malt Beverage	Sun Devil	-	5.00
Tecate	12	4.52	Lager	Cerveceria Cuahatemoc	Mexico	no
Thames Festive Ale	17	7.72	Ale - Seasonal	Thames America Trading Co.	England	no
Thames Welsh Ale	17	5.25	Ale	Thames America Trading Co.	England	no
Thames Welsh Bitter Ale	17	4.18	Bitter	Thames America Trading Co.	England	no
Thomas Brau non-alcoholic	12	0.47	Non-alcoholic	Paulander Brewing	Germany	< 0.5%
Thomas Hardy's Ale	11.2	12.69	Ale	Eldridge Pope & Co.	England	no
Thomas Kemper Amber Lager	12	4.62	Lager	Thomas Kemper Brewing Co.	USA, WA	4.50
Thomas Kemper Bohemian Dunkel Lager	12	5.32	Lager	Thomas Kemper Brewing Co.	USA, WA	5.60

Table 1. Brand, Measured Alcohol Concentration (%v/v), Classification, Manufacturer, Origin, and Alcohol Content for 391 Beers and Malt Beverages (continued)

Brand	Fluid ounces	Measured alcohol conc. (%v/v)	Classification	Manufacturer	Origin	Labeled
Thomas Kemper Hefeweizen	12	4.94	Hefeweizen	Thomas Kemper Brewing Co.	USA, WA	no
Thomas Kemper Honey Weizen	12	4.97	Ale	Thomas Kemper Brewing Co.	USA, WA	5.00
Thomas Kemper Weizenberry	12	4.97	Fruit	Thomas Kemper Brewing Co.	USA, WA	5.00
Thomas Kemper Winterbrau	12	6.30	Ale - Seasonal	Thomas Kemper Brewing Co.	USA, WA	no
Three Finger Jack Roasted Red	12	4.97	Lager	Saxer Brewing Co.	USA, OR	no
Three Finger Jack Stout	12	4.97	Stout	Saxer Brewing Co.	USA, OR	no
Three Finger Jack Summer	12	5.44	Lager - Seasonal	Saxer Brewing Co.	USA, OR	no
Tri-Motor Amber Ale	12	4.97	Ale	Lang Creek Brewery	USA, MT	no
Tsingtao Beer	—*	4.62	Lager	Tsingtao Beer	China	no
Watney's Cream Stout	12	4.34	Stout	Watney Truman LTD	England	no
Weinhard's Blue Boar Hefeweizen	12	4.91	Hefeweizen	Blitz-Weinhard's Brewery	USA, OR	no
Weinhard's Blue Boar Ice ale	12	6.01	Ice	Blitz-Weinhard's Brewery	USA, OR	5.80
Weinhard's Blue Boar Pale Ale	12	4.68	Ale	Blitz-Weinhard's Brewery	USA, OR	no
Weinhard's Blue Boar Red Lager	12	4.97	Lager	Blitz-Weinhard's Brewery	USA, OR	no
Whistler Black Tusk Ale	12	5.57	Ale	Whistler Brewing Co.	Canada	no
Whistler Mother's Pale Ale	12	5.26	Ale	Whistler Brewing Co.	Canada	no
Whistler Premium Lager	12	5.16	Lager	Whistler Brewing Co.	Canada	no
Widmer Amberbier	12	5.70	Ale	Widmer Brother's Brewing Co.	USA, OR	no
Widmer Blackbier	12	6.55	Ale	Widmer Brother's Brewing Co.	USA, OR	6.25
Widmer Czech Pilsner	12	5.00	Lager	Widmer Brother's Brewing Co.	USA, OR	no
Widmer Hefeweizen	12	4.88	Hefeweizen	Widmer Brother's Brewing Co.	USA, OR	no
Widmer Vienna	12	5.19	Ale	Widmer Brother's Brewing Co.	USA, OR	no
Widmer Wildberry Black Raspberry	12	4.68	Fruit	Widmer Brother's Brewing Co.	USA, OR	no
Widmer Winternacht	12	6.58	Ale - Seasonal	Widmer Brother's Brewing Co.	USA, OR	no
Yakima Honey Wheat	12	4.94	Hefeweizen	Rainier Brewing Co.	USA, WA	4.80
Yakima Red	12	5.47	Ale	Rainier Brewing Co.	USA, WA	no
Younger's Tartan Special	12	4.37	Ale	Scottish & Newcastle Breweries PLC	Scotland	no
Young's Oatmeal Stout	18.7	4.87	Stout	The Ram Brewery	England	no
Young's Old Nick Ale	18.7	6.77	Ale	The Ram Brewery	England	no
Young's Ram Rod Pale Ale	18.7	4.84	Ale	The Ram Brewery	England	no
Young's Special London Ale	12	5.76	Ale	The Ram Brewery	England	no
Zig Zag	12	4.91	Lager	Portland Brewing Co.	USA, OR	no
Zima	12	4.97	Malt Beverage	Zima Beverage Co.	USA, TN	no

* Not recorded.

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