

Pils/Pilsener, Northern German

Beer culture of origin	Germany
AKA	Edelpils
Related Styles	Czech Pilsner, Dortmund Export, Bavarian Helles, European Pilsner, American Lager

Style Description

A northern German Pils is mostly characterized by its straw-blond appearance—a beer simply could not get much paler without the use of adjuncts. The classic version has an assertive citrus-like, up-front, noble-hop kick from as many as 40 BU. Many mass-produced modern versions, on the other hand, now have a much reduced bitterness (most between 28 and 36 BU, with some as low as 23 BU).

A Pils is well-attenuated and has a very dry, crisp and refreshing finish, with a spritzy effervescence and next to no fruitiness, esters or diacetyl. It has a sturdy, long-lasting head. The Northern German Pils is an adaptation of the original Czech Pilsner Urquell of 1842.

The first Pilsner-style beer in Germany was brewed in 1872, by the Aktienbrauerei Zum Bierkeller of Radeberg near Dresden, the capital of the German State of Saxony, which borders the Czech Republic. This brewery has since been renamed Radeberger. In line with German grammar, the adjective “Pilsner”—without the middle “e”—refers to anything made in Pilsen, whereas “Pilsener”—with the middle “e”—denotes anything that is like a thing from Pilsen but not made there. Not all German breweries, however, label their Pilseners (or Pils) in line with this etymological distinction.

Specifications

OG	1.048 (12 °P)		BU	44		ABV	5%
FG	1.010 (2.5 °P)		Color	2 SRM/4.2 EBC		ABW	4%

Ingredients @ nominal 80% system extract efficiency (rounded)

MALT	%	1 HL (lbs)	1 HL (kg)	1 BBL (lbs)	1 BBL (kg)	5 Gal (lbs)	19 l (kg)
Weyermann® Extra Pale Premium Pilsner	90	31.19	14.15	36.59	16.60	5.90	2.69
Weyermann® Carafoam®	10	3.47	1.57	4.07	1.84	0.66	0.30
Total Grain	100	34.66	15.72	40.65	18.44	6.56	2.99
HOPS	%AA	1 HL (oz)	1 HL (g)	1 BBL (oz)	1 BBL (g)	5 Gal (oz)	19 l (g)
Bittering: Barth-Haas Tettnanger	4	4.64	132	5.4	154	0.9	25
Flavor: Barth-Haas Tettnanger	4	6.49	184	7.6	216	1.2	35
Aroma: Barth-Haas Hallertauer Mittelfrüh	4.25	6.49	184	7.6	216	1.2	35
Yeast	German or Danish dry-fermenting lager yeast						

Brewing Process

Multi-step infusion. Mash in @ 122 °F (50 °C); rest 30 min. Raise temp to 144 °F (62 °C). Rest 20 min. Raise temp to 162 °F (72 °C). Rest 20 min. Raise temp to mash-out @ 172 °F (78 °C). Lauter 90 min. Boil for 90 min. 1st hops @ 10 min; 2nd hops @ 30 min; 3rd hops @ 75 min. Fermentation temp @ 50 °F – 59 °F (10 °C – 15 °C), depending on yeast strain. Rack @ terminal gravity. Reduce temp to 34°F (1°C). Lager for 12 wks. Rack. Condition. Package.

DID YOU KNOW ... ?

Until the 16th century, government regulations like the *Reinheitsgebot* and the summer brewing prohibition were the driving forces behind the changes in brewing practices, particularly in Bavaria. But even after 1516, when only barley, hops and water were used, the result of the brewing process was still a matter of luck. Fermentation was commonly regarded as a mystical and spontaneous process, a form of putrefaction. The milky substance that settled out at the bottom of the fermenter or formed a flocculent layer at the top of the brew was not recognized for what it was (yeast). Instead, it was considered an impurity, a by-product of putrefaction that better be discarded. It was not known that this very “by-product” made alcoholic fermentation happen.

As any brewers can guess, in practice, any number of airborne yeast strains, from lager yeasts (*Saccharomyces uvarum*) to ale yeasts (*Saccharomyces cerevisiae*) to wild yeasts, could be—and probably were present in any given brew and, most likely, all were infected with bacteria. Which yeast became dominant and defined the character of the beer depended largely on the ambient temperature. The warmer the cellar, the more likely the beer would be an ale. Off-flavors in beer and a short shelf life were probably the rule rather than the exception, especially for beers brewed during the hot summer months.

A theoretical understanding of the metabolism of yeast, of the differences between warm and cold fermenting yeasts--and of the differences between the beers they produce--had to wait until the late 19th century. It was the German physician and chemist Andreas Libau, a.k.a. Libavius (around 1560 - 1616), who was the first to point out that fermentation and putrefaction were different processes. He knew about carbon dioxide (CO₂) and was the first to describe a method of distilling alcohol. It is doubtful that any brewer of Libavius' time read his heavy tome, *Alchymia* (published in Latin, in 1606), which was the first systematic text book of chemistry, but later scientists did. Libavius laid the conceptual foundation for all subsequent discoveries about the true nature of fermentation.