

# German Pils

German Pils (5 D)

**Type:** All Grain  
**Batch Size:** 120,00 L  
**Boil Size:** 140,00 L  
**Boil Time:** 60 min  
**End of Boil Vol:** 138,11 L  
**Final Bottling Vol:** 120,00 L  
**Fermentation:** Lager, Single Stage

**Date:** 10 Nov 2023  
**Brewer:** BR Craft  
**Asst Brewer:**  
**Equipment:** Experimental  
**Efficiency:** 72,00 %  
**Est Mash Efficiency:** 72,0 %  
**Taste Rating:** 30,0



**Taste Notes:**

## Ingredients

Amt	Name	Type	#	%/IBU	Volume
24,00 kg	Malte Pilsen Agrária (3,8 EBC)	Grain	1	96,0 %	15,65 L
1,00 kg	Munich II (Weyermann) (25,0 EBC)	Grain	2	4,0 %	0,65 L
50,00 g	Hallertau Magnum [13,00 %] - Boil 60,0 min	Hop	3	15,4 IBUs	-
250,00 g	Spalter Select [3,70 %] - Boil 5,0 min	Hop	4	11,2 IBUs	-
250,00 g	Spalter Select [3,70 %] - Steep/Whirlpool 20,0 min, 90,2 C	Hop	5	6,4 IBUs	-
10,0 pkg	Pilsner (Pinnacle #) [50,28 ml]	Yeast	6	-	-

## Gravity, Alcohol Content and Color

**Est Original Gravity:** 1,047 SG  
**Est Final Gravity:** 1,010 SG  
**Estimated Alcohol by Vol:** 4,9 %  
**Bitterness:** 33,0 IBUs  
**Est Color:** 7,7 EBC

**Measured Original Gravity:** 1,046 SG  
**Measured Final Gravity:** 1,010 SG  
**Actual Alcohol by Vol:** 4,7 %  
**Calories:** 427,1 kcal/l

## Mash Profile

**Mash Name:** Temperature Mash, 1 Step, Medium Body  
**Sparge Water:** 90,04 L  
**Sparge Temperature:** 78,0 C  
**Adjust Temp for Equipment:** FALSE  
**Est Mash PH:** 5,70  
**Measured Mash PH:** 5,20

**Total Grain Weight:** 25,00 kg  
**Grain Temperature:** 22,2 C  
**Tun Temperature:** 22,2 C  
**Target Mash PH:** 5,20  
**Mash Acid Addition:** None  
**Sparge Acid Addition:** None

## Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 75,00 L of water at 71,5 C	66,0 C	60 min
Mash Out	Heat to 78,0 C over 10 min	78,0 C	10 min

**Sparge:** Fly sparge with 90,04 L water at 78,0 C

**Mash Notes:** Temperature mash for use when mashing in a brew pot over a heat source such as the stove. Use heat to maintain desired temperature during the mash.

## Carbonation and Storage

**Carbonation Type:** Keg  
**Pressure/Weight:** 86,48 KPA  
**Keg/Bottling Temperature:** 7,2 C  
**Fermentation:** Lager, Single Stage  
**Fermenter:**

**Volumes of CO2:** 2,3  
**Carbonation Est:** Keg with 86,48 KPA  
**Carbonation (from Meas Vol):** Keg with 86,48 KPA  
**Age for:** 21,00 days  
**Storage Temperature:** 9,0 C

## Notes

Fermentou inicialmente a 12°C com subida para 14°C para a rampa de diacetil. Fermentou por 21 dias à 0°C

