Pils włoski

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **20**
- SRM **3.7**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **20.5 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.56 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **67.9C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg *(89.1%)*	81 %	4
Grain	Pszeniczny	0.2 kg *(4%)*	85 %	4
Grain	Weyermann - Carapils	0.25 kg *(5%)*	78 %	4
Grain	Weyermann - Acidulated Malt	0.1 kg *(2%)*	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Puławski	30 g	70 min	4.3 %
Aroma (end of boil)	Sybilla	20 g	15 min	3.5 %
Aroma (end of boil)	Hallertau Spalt Select	10 g	15 min	3.4 %
Aroma (end of boil)	Hallertau Spalt Select	30 g	0 min	3.4 %
Dry Hop	Hallertau Spalt Select	50 g	2 day(s)	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis