

Piwo Pilotów

- Gravity **9 BLG**
- ABV **3.5 %**
- IBU **35**
- SRM **5.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **14.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **77C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (83.3%)	80 %	5
Grain	Weyermann - Carapils	0.5 kg (11.9%)	78 %	4
Grain	Strzegom Karmel 150	0.2 kg (4.8%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Zula	10 g	50 min	8.3 %
Whirlpool	Idaho 7	30 g	20 min	12.7 %
Whirlpool	Citra	30 g	20 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis