

## American Pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **33**
- SRM **3.3**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **7 %**
- Size with trub loss **28.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **37.2 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **25.3 liter(s)**

### Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **19.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **23.1 liter(s)** of **76C** water or to achieve **37.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	5 kg (88.8%)	82 %	4
Grain	Weyermann - Carapils	0.2 kg (3.6%)	78 %	4
Grain	Pszeniczny	0.3 kg (5.3%)	85 %	4
Grain	Carahell	0.13 kg (2.3%)	77 %	26

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	27 g	60 min	15.8 %
Aroma (end of boil)	Citra	30 g	0 min	12 %
Aroma (end of boil)	Centennial	30 g	0 min	10.5 %
Dry Hop	Amarillo	20 g	3 day(s)	9.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Dry	11.5 g	---

### Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	15 g	Boil	15 min