

## #089 American Pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **30**
- SRM **3.1**
- Style **Classic American Pilsner**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.1 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Best Heidelberg	4.3 kg (95.6%)	80.5 %	3
Grain	Weyermann - Carapils	0.2 kg (4.4%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Talus	20 g	60 min	8.2 %
Boil	Talus	30 g	10 min	8.2 %
Dry Hop	Talus	25 g	3 day(s)	8.2 %
Dry Hop	Amora Preta	50 g	3 day(s)	11.2 %
Dry Hop	Nectaron	20 g	3 day(s)	12 %
Dry Hop	Citra	15 g	3 day(s)	12.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	23 g	Fermentis

### Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc T	1.25 g	Boil	10 min
Other	pożywka dla drożdży Wyeast	3 g	Boil	10 min