

## AMERICAN PILS

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **21**
- SRM **2.7**
- Style **Premium American Lager**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **32.7 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **19.1 liter(s)**
- Total mash volume **24.9 liter(s)**

### Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.1 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **32.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5.5 kg (94.8%)	80.5 %	2
Grain	Briess - Carapils Malt	0.3 kg (5.2%)	74 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	40 g	60 min	6 %
Whirlpool	Citra	50 g	0 min	12 %
Whirlpool	Cascade	50 g	0 min	6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
safale w34/70	Lager	Dry	11.5 g	safale

### Extras

Type	Name	Amount	Use for	Time
Fining	IRISH MOSS	5 g	Boil	10 min

## Notes

- HOP STAND od 78-70\* -> około 30 min.  
*Oct 21, 2018, 5:29 PM*