

PL-USA PILS

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **33**
- SRM **3.9**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **0 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **55 C**, Time **15 min**
- Temp **67 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	5 kg (83.3%)	81 %	4
Grain	Briess - Carapils Malt	1 kg (16.7%)	74 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12.6 %
Aroma (end of boil)	Sybilla	60 g	5 min	6.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-189	Lager	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	0.5 g	Boil	5 min