

Classic

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **34**
- SRM **6.8**
- Style **Classic American Pilsner**

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 **15 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **21.1 liter(s)**

Steps

- Temp **64 C**, Time **10 min**
- Temp **67 C**, Time **50 min**
- Temp **73 C**, Time **10 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **73C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (83.3%)	80 %	4
Grain	Pale Ale	0.5 kg (10.4%)	80 %	4
Grain	Crystal 150 Castle Malting	0.3 kg (6.3%)	--- %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	50 min	12.8 %
Aroma (end of boil)	Chinook	30 g	5 min	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Slant	200 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc T	1 g	Boil	10 min