

Pale Ale

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **21**
- SRM **3.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

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

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (93%)	81 %	4
Grain	Weyermann - Carapils	0.3 kg (7%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	5 g	60 min	10 %
Boil	Lublin (Lubelski)	10 g	10 min	4 %
Boil	Marynka	25 g	10 min	10 %
Boil	Lublin (Lubelski)	20 g	10 min	4 %
Aroma (end of boil)	Citra	30 g	0 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	150 g	---