

American Pale Ale

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **41**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.6 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (87.9%)	80 %	5
Grain	Karmelowy Jasny 30EBC	0.25 kg (5.5%)	75 %	30
Grain	Strzegom Monachijski typ II	0.3 kg (6.6%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	7.4 %
Boil	Citra	5 g	60 min	12.5 %
Boil	Citra	20 g	20 min	12.5 %
Aroma (end of boil)	Citra	25 g	0 min	12.5 %
Dry Hop	Citra	50 g	5 day(s)	12.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Liquid	100 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	70 min
Fining	Whirfloc	0.5 g	Boil	10 min
Other	Kwas askorbinowy	4 g	Bottling	---