

## HEIPA #2

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **7.2**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **0 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **45 min**
- Evaporation rate **12 %/h**
- Boil size **19.3 liter(s)**

### Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.9 liter(s)**
- Total mash volume **15.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **11.9 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **19.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3.2 kg (81%)	74.84 %	13
Grain	Viking Wheat Malt	0.5 kg (12.7%)	84 %	15
Grain	Oats, Flaked	0.25 kg (6.3%)	80 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	10 g	15 min	9.2 %
Boil	Citra	10 g	15 min	12 %
Boil	Galaxy	10 g	5 min	14 %
Boil	Citra	10 g	5 min	12 %
Boil	Amarillo	10 g	0 min	9.2 %
Boil	Citra	10 g	0 min	12 %
Dry Hop	Amarillo	25 g	0 day(s)	9.2 %
Dry Hop	Citra	25 g	0 day(s)	12 %
Dry Hop	Galaxy	25 g	0 day(s)	14 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM55 Zielone wzgórze	Ale	Liquid	250 ml	Fermentum mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Phosphoric Acid 85%	3 g	Mash	60 min
Water Agent	Siarczan Magnezu (MgSO4)	2 g	Mash	60 min
Water Agent	Chlorek Wapnia	1.47 g	Mash	60 min
Water Agent	Gips (Calcium Sulfate)	0.85 g	Mash	60 min
Water Agent	Sól	0.75 g	Mash	60 min
Water Agent	Siarczan Magnezu (MgSO4)	2 g	Mash	60 min
Water Agent	Chlorek Wapnia	1.55 g	Mash	60 min
Water Agent	Gips (Calcium Sulfate)	0.89 g	Mash	60 min
Water Agent	Sól	0.79 g	Mash	60 min