

## Session IPA Amora Preta + Vermelho

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **63**
- SRM **4.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.1 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **72 C**, Time **50 min**
- Temp **80 C**, Time **1 min**

### Mash step by step

- Heat up **22.8 liter(s)** of strike water to **79.4C**
- Add grains
- Keep mash **50 min** at **72C**
- Keep mash **1 min** at **80C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	3 kg (46.2%)	81 %	4
Grain	Viking Pale Ale malt	1.5 kg (23.1%)	80 %	5
Grain	Pszeniczny	1 kg (15.4%)	85 %	4
Grain	Płatki owsiane	0.5 kg (7.7%)	60 %	3
Grain	Rye, Flaked	0.5 kg (7.7%)	78.3 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	30 g	40 min	12.5 %
Boil	Amora Preta	30 g	20 min	7.4 %
Boil	Vermelho	30 g	20 min	9.1 %
Whirlpool	Amora preta	40 g	1 min	7.4 %

### Yeasts

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