

## Session mandarina IPA

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **45**
- SRM **4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **50 min**
- Evaporation rate **15 %/h**
- Boil size **29.7 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **64 C**, Time **10 min**
- Temp **72 C**, Time **40 min**
- Temp **80 C**, Time **1 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **80C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (50%)	82 %	4
Grain	Viking Pale Ale malt	2.5 kg (41.7%)	80 %	5
Grain	Pszeniczny	0.5 kg (8.3%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	20 g	40 min	12.5 %
Boil	Saaz (Czech Republic)	40 g	20 min	3 %
Boil	Mandarina Bavaria	40 g	20 min	6.9 %
Dry Hop	Saaz (Czech Republic)	100 g	3 day(s)	3 %
Dry Hop	Mandarina Bavaria	100 g	3 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis