

## Session IPA hamerykanska

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- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **44**
- SRM **4.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Ireks Pale Ale	4.2 kg (84%)	80 %	7
Grain	Płatki owsiane	0.3 kg (6%)	85 %	3
Grain	płatki jęczmienne	0.3 kg (6%)	--- %	3
Grain	Weyermann - Carapils	0.2 kg (4%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	60 min	6.8 %
Boil	Amarillo	10 g	30 min	9.8 %
Boil	Cascade	10 g	10 min	6.8 %
Boil	Amarillo	20 g	10 min	9.8 %
Boil	Centennial	15 g	10 min	9.9 %
Aroma (end of boil)	Mosaic	30 g	2 min	12.6 %
Boil	Centennial	15 g	2 min	9.9 %
Whirlpool	Mosaic	10 g	0 min	12.6 %
Whirlpool	Cascade	10 g	0 min	6.8 %
Whirlpool	Sabro	30 g	0 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	800 ml	fermentis