

## SESSION SINGLE HOPS IPA PŁ 149 # 83

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **79**
- SRM **3.1**
- Style **Specialty Beer**

### Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **10 %**
- Size with trub loss **17.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **23 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

### Steps

- Temp **62 C**, Time **10 min**
- Temp **65 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **10 min** at **62C**
- Keep mash **40 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **16 liter(s)** of **76C** water or to achieve **23 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.2 kg (91.4%)	81 %	4
Grain	Weyermann - Carapils	0.1 kg (2.9%)	78 %	4
Grain	Rice, Flaked	0.2 kg (5.7%)	70 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Płotowy 149 Polish Hops	50 g	45 min	12 %
Aroma (end of boil)	Płotowy 149 Polish Hops	50 g	1 min	12 %
Dry Hop	Płotowy 149 Polish Hops	100 g	5 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis