

## #36 Waka Session IPA

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **50**
- SRM **4.5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21.1 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **15.8 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (47.4%)	81 %	4
Grain	Castle Pale Ale	2 kg (38%)	80 %	8
Grain	Weyermann - Carapils	0.5 kg (9.5%)	78 %	4
Grain	Słód owsiany Fawcett	0.27 kg (5.1%)	61 %	5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	11 %
Boil	Sybilla	15 g	60 min	6.9 %
Boil	Marynka	30 g	30 min	6.7 %
Aroma (end of boil)	Magnum	10 g	5 min	11 %
Aroma (end of boil)	Sybilla	5 g	5 min	6.9 %
Aroma (end of boil)	Dr Rudi	30 g	5 min	10.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Slant	200 ml	Fermentis
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