

## W-2 Single hop Challenger

- Gravity **14.1 BLG**
- ABV ---
- IBU **44**
- SRM **10.7**
- Style **English IPA**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **10 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **17 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

### Steps

- Temp **65 C**, Time **30 min**
- Temp **78 C**, Time **10 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **9.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **17 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (76.9%)	81 %	4
Grain	Pszeniczny	0.5 kg (15.4%)	85 %	4
Grain	Strzegom Karmel 150	0.25 kg (7.7%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	8.3 %
Boil	Challenger	10 g	30 min	8.3 %
Boil	Challenger	20 g	5 min	8.3 %

### Yeasts

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