

## Ostatki +

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **41**
- SRM **13.4**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **3.5 %**
- Size with trub loss **14.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **4 %/h**
- Boil size **15.1 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.2 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **11 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.55 kg (49.3%)	79 %	6
Grain	Strzegom Pilzneński	1.5 kg (47.7%)	80 %	4
Grain	Strzegom pszenica prażona	0.05 kg (1.6%)	70 %	1000
Grain	Jęczmień palony	0.045 kg (1.4%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	30 min	7.1 %
Boil	Citra	10 g	30 min	14.2 %
Boil	Cascade	10 g	10 min	7.1 %
Boil	Citra	10 g	10 min	14.2 %
Dry Hop	Cascade	10 g	3 day(s)	7.1 %
Dry Hop	Citra	10 g	3 day(s)	14.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safeale

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	10 min