

## 14. Zrzut chmieli

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **85**
- SRM **4.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **25.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.9 kg (46%)	79 %	6
Grain	Pszeniczny	0.5 kg (7.9%)	81 %	4
Grain	Pilzneński	2.9 kg (46%)	81 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	50 g	60 min	8 %
Boil	Target	33 g	60 min	9 %
Aroma (end of boil)	Citra	25 g	5 min	12 %
Aroma (end of boil)	Amarillo	25 g	5 min	9.5 %
Whirlpool	Citra	25 g	0 min	12 %
Whirlpool	Amarillo	25 g	0 min	9.5 %
Whirlpool	Citra	50 g	2 min	12 %
Dry Hop	Amarillo	50 g	2 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	trawa cytrynowa	20 g	Boil	10 min