

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **89**
- SRM **12.7**
- Style **Red 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **69 C**, Time **60 min**
- Temp **80 C**, Time **5 min**

### Mash step by step

- Heat up **19.5 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **80C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	1 kg (15.4%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (15.4%)	79 %	22
Grain	Strzegom Wiedeński	1 kg (15.4%)	79 %	10
Grain	Monachijski	1 kg (15.4%)	80 %	70
Grain	Viking Pale Ale malt	2 kg (30.8%)	80 %	5
Grain	Karmelowy Czerwony	0.5 kg (7.7%)	75 %	59

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	40 g	60 min	15 %
Boil	Sterling	50 g	20 min	4.5 %
Boil	El Dorado	50 g	5 min	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
gorzelnicze 24h	Ale	Dry	25 g	---

## Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	20 g	Boil	10 min

## Notes

- Piwo robione na drożdżach szybkich, gorzelnicznych. Fermentacja w dwóch fermentorach i butelkowanie kolejnego dnia.  
*Sep 10, 2019, 9:52 AM*