

Rye Pale Ale 20l

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **7.2**
- Style **Rye 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 **12 %/h**
- Boil size **26.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.2 kg (57.1%)	79 %	6
Grain	Strzegom Monachijski typ I	0.6 kg (10.7%)	79 %	16
Grain	Strzegom Karmel 150	0.2 kg (3.6%)	75 %	150
Grain	Rye, Flaked	0.8 kg (14.3%)	78.3 %	4
Grain	Barley, Flaked	0.8 kg (14.3%)	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	30 g	60 min	11 %
Aroma (end of boil)	Phoenix	40 g	0 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---