

test

- Gravity **13.2 BLG**
- ABV ---
- IBU **57**
- SRM **12.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4 kg (83.3%)	79 %	6
Grain	Strzegom Karmel 150	0.5 kg (10.4%)	75 %	150
Grain	Pszeniczny	0.3 kg (6.3%)	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	30 min	11 %
Aroma (end of boil)	Marynka	10 g	5 min	10 %
Boil	lunga	25 g	60 min	11 %
Aroma (end of boil)	Sybilla	25 g	0 min	3.5 %

Yeasts

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